<110> University of Utah Research Foundation Cognetix, Inc. Olivera, Baldomero M. McIntosh, J. Michael Watkins, Maren Garrett, James E. Shon, Ki-Joon Jacobsen, Richard Jones, Robert M. Cartier, G. Edward <120> Omega-Conopeptides

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<151> 2000-07-21

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<151> 2001-02-05

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and 12 is Pro or Hyp

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-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

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      25 and 34 is Pro or Hyp; Xaa at residue10 is Tyr, 125I-Tyr, mono
      -iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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                                                                    180
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gttccgagcc aatgctgcag aggtccttgc aagaacggtc gttgtactcc atccccttct
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                                                                    300
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       11, 18, 26 and 28 is Pro or Hyp; Xaa at residue 31is Trp or Bromo
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Gly Xaa Cys Lys Asn Gly Arg Cys Thr Xaa Ser Xaa Ser Xaa Xaa
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gaaataaaag ccgcattgc
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Thr ?	Tyr 50	Gly	Lys	Pro	Cys	Gly 55	Ile	Gln	Asn	Asp	Cys 60	Cys	Asn	Thr	Cys	
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Thr (Суѕ	Asp	Xaa 20	Ala	Arg	Arg	Thr	Cys 25	Thr							
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Ala	Leu	Arg 35	Lys	Thr	Thr	Lys	Leu 40	Ser	Leu	Ser	Thr	Arg 45	Cys	Lys	Gly	

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       yr
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Lys Xaa Ser Cys Arg Asn Gly Lys Cys
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aagcccaaca attgatcttc ccccttctgt gctctatcct tttctgcctg agtcctcctt
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Cys Ser Pro Phe Ser Asp Arg Cys Met Lys Lys Pro Asn Asn
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       pho-Tyr
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aggacttcgt atgactgctg cacgggttct tgcagaaatg gtagatgtgg ctgatccagc
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gcctgatctt cccccttctg tgctccatcc ttttctgcct gagtcctcct tacctqaqaq
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Lys Gly Ser Ser Cys His Arg Thr Ser Tyr Asp Cys Cys Thr Gly Ser
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Thr Gly Ser Cys Arg Asn Gly Arg Cys
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                                                                      180
tattgcaata aagattccag tgtatgtgtg gcaacctcat acccgtgagt ggccatgaac
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                                                                      300
caaaaaaaaa aaaaaaaaa a
                                                                      321
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       73
<212>
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Ser Val Cys Val Ala Thr Ser Tyr Pro
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       -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Xaa
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                                                                      120
ctatcetttt etgeetgatt eeteettace tgagageggt eatgaaceae teateacetg
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Ser Gly Ser Cys Asn Arg Gly Ser Cys
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tgtgctccat ccttttctgc ctgagtcctc cttatctgag agtggtcatg aaccactcac
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     Xaa at residue 7 and 20 is Pro or Hyp; Xaa at residue 4 is Tyr, 1
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Thr Cys Asp Xaa Ala Arg Lys Thr Cys Thr
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      (1)..(25)
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      Xaa at residue 7 is Pro or Hyp
<400> 86
Cys Arg Gly Arg Gly Kaa Cys Thr Lys Ala Met Phe Asn Cys Cys
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10
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Ser Gly Ser Cys Asn Arg Gly Arg Cys
            20
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       87
<211>
       374
<212>
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<213>
      Conus circumcisus
<400> 87
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acqacctqtc aactcatcac agctgatgac tccagaggta cgcaggagca tcgtgccctg
                                                                      120
aggteggaca ecaaacteee catgtegact egetgeaagg gtaaaggage ateatgtegt
                                                                      180
aagactatgt ataactgctg cagcggttct tgcagcaacg gtagatgtgg ctgatccagc
                                                                      240
qcctqatctt cccccttctg ctgctctatc cttttctgcc tgagtcctcc ttacctgaga
                                                                      300
gctggtcatg aaccactcat cacctgctcc tctggaggcc cagaggagct acattgaaat
                                                                      360
                                                                      374
aaaagccgca ttgc
<210>
       88
<211>
      71
<212>
      PRT
<213>
      Conus circumcisus
<400> 88
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Thr
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Glu His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Pro Met Ser Thr Arg Cys Lys Gly
Lys Gly Ala Ser Cys Arg Lys Thr Met Tyr Asn Cys Cys Ser Gly Ser
Cys Ser Asn Gly Arg Cys Gly
<210>
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      25
<212>
      PRT
<213> Conus circumcisus
<220>
<221>
      PEPTIDE
<222>
       (1)..(25)
      Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
<223>
       -sulpho-Tyr or O-phospho-Tyr
<400> 89
Cys Lys Gly Lys Gly Ala Ser Cys Arg Lys Thr Met Xaa Asn Cys Cys
Ser Gly Ser Cys Ser Asn Gly Arg Cys
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20

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       90
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       379
 <212>
       DNA
 <213>
       Conus circumcisus
 <400>
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                                                                        60
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                                                                       120
aggtcggcca ccaaagtctc caagtcgact agctgcatgg aagccggatc ttattgccgc
                                                                       180
tctactacga gaacctgctg cggttattgc tcttatttca gcaaaaaatg tattgacttt
                                                                       240
cccagcaact gatcttcccc ctactgtgct ctatcctttt ctgcctgagt cctccttacc
                                                                       300
tgagagtggt catgaaccac tcatcaccct actcctctgg aggcccagag gagctacatt
                                                                      360
gaaataaaag ccgcattgc
                                                                      379
<210>
       91
<211>
       77
<212>
       PRT
<213>
       Conus circumcisus
<400> 91
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Thr
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Ala Thr Lys Val Ser Lys Ser Thr Ser Cys Met Glu
Ala Gly Ser Tyr Cys Arg Ser Thr Thr Arg Thr Cys Cys Gly Tyr Cys
Ser Tyr Phe Ser Lys Lys Cys Ile Asp Phe Pro Ser Asn
<210> 92
<211>
       35
<212>
      PRT
<213>
      Conus circumcisus
<220>
<221>
       PEPTIDE
<222>
       (1)..(35)
       Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 33 i
       s Pro or Hyp; Xaa at residue 10, 21 and 24 is Tyr, 125I-Tyr, mono
       -iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 92
Ser Thr Ser Cys Met Xaa Ala Gly Ser Xaa Cys Arg Ser Thr Thr Arg
Thr Cys Cys Gly Xaa Cys Ser Xaa Phe Ser Lys Lys Cys Ile Asp Phe
Xaa Ser Asn
        35
<210> 93
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<211> 379
<212> DNA
<213> Conus circumcisus
<400> 93
accaaaacca tcatcaaaat gaaactgacg tgtgtggtga tcgtcgccgt gctgctcctg
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acquectgte aucteateue agetgatque tecagaggta egeaggageu tegtgeeetg
                                                                      120
aggtcggaca ccaaactccc catgtcgact cgctgcaaga gtaaaggagc aaaatgttca
                                                                      180
aggettatgt atgactgetg cageggttet tgeageaggt acteaggtag atgtggetga
                                                                      240
tocaqcqcct qatcttcccc cttctgctgc tctatccttt tctgcctgag tcctccttac
                                                                      300
ctgagagtgg tcatgaacca ctcatcacct actcctctgg aggcccagag gagctacatt
                                                                      360
                                                                      379
gaaataaaag ccgcattgc
<210>
       94
<211>
      73
<212>
      PRT
<213> Conus circumcisus
<400> 94
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Thr
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Glu His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Pro Met Ser Thr Arg Cys Lys Ser
Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys Ser Gly Ser
Cys Ser Arg Tyr Ser Gly Arg Cys Gly
       95
<210>
<211> 27
<212> PRT
<213> Conus circumcisus
<220>
<221>
      PEPTIDE
<222>
       (1)..(27)
      Xaa at residue 13 and 23 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo
       -Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 95
Cys Lys Ser Lys Gly Ala Lys Cys Ser Arg Leu Met Xaa Asp Cys Cys
Ser Gly Ser Cys Ser Arg Xaa Ser Gly Arg Cys
<210>
       96
<211>
       379
<212>
      DNA
<213> Conus circumcisus
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<400> 96

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accaaaacca tcatcaaaat gaaactgacg tgtgtggtga tcgtcgccgt gctgctcctg
                                                                       60
acqacctgtc aactcatcac agctgatgac tccagaggta cgcagaagca tcgttccctg
                                                                      120
acgteggeea ceaaagtete caagtegaet ggetgeatga aageeggate ttattgeege
                                                                      180
tctactacga gaacttgctg cggttattgc gcttatttcg gcaaaaaatg tattgactat
                                                                      240
cccagcaact gatcttcccc ctactgtgct ctatcctttt ctgcctaagt cctccttacc
                                                                      300
tgagagtggt catgaaccac tcatcaccct actcctctgg aggcccagag gagctacatt
                                                                      360
gaaataaaag ccgcattgc
                                                                      379
<.2.1.0>
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<211>
<212>
      PRT
<213> Conus circumcisus
<400> 97
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Thr
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ser Leu Thr Ser Ala Thr Lys Val Ser Lys Ser Thr Gly Cys Met Lys
Ala Gly Ser Tyr Cys Arg Ser Thr Thr Arg Thr Cys Cys Gly Tyr Cys
Ala Tyr Phe Gly Lys Lys Cys Ile Asp Tyr Pro Ser Asn
<210>
      98
<211>
      35
<212>
      PRT
<213>
      Conus circumcisus
<220>
<221>
      PEPTIDE
      (1)..(35)
<222>
      Xaa at residue 33 is Pro or Hyp; Xaa at residue 10, 21, 24 and 32
        is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-
      phospho-Tyr
<400> 98
Ser Thr Gly Cys Met Lys Ala Gly Ser Xaa Cys Arg Ser Thr Thr Arg
Thr Cys Cys Gly Xaa Cys Ala Xaa Phe Gly Lys Lys Cys Ile Asp Xaa
Xaa Ser Asn
        35
<210>
       99
<211>
       362
<212>
      DNA
<213>
      Conus consors
<400> 99
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acagetgatg actecagagg tacgeagaag categtgeee tgaagtetta caceaaacte
                                                                      120
tocatqttaa ctttqcqctq cqcatcttac qqaaaacctt qtgqtattga caacgactgc
                                                                      180
tgcaatacat gcgatccagc cagaaagaca tgtacgtagc tgatccggcg tctgatcttc
                                                                      240
ccccttctgt gctctatcct tttctgcctg agtcctcctt acctgagagt ggtcatgaac
                                                                      300
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cactcatcac ctagetecte tggaggette agaggageta caatgaaata aaagegeatt
gc
                                                                      362
<210>
      100
<211>
      72
<2.1.2>
      PRT_
<213>
      Conus consors
<400> 100
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Cys Gln Leu Leu Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Lys Ser Tyr Thr Lys Leu Ser Met Leu Thr Leu Arg Cys Ala
Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn Thr Cys
Asp Pro Ala Arg Lys Thr Cys Thr
65
<210>
      101
<211>
<212>
      PRT
<213>
      Conus consors
<220>
<221>
      PEPTIDE
<222>
       (1)..(26)
      Xaa at residue 7 and 20 is Pro or Hyp; Xaa at residue 4 is Tyr, 1
       25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
<400> 101
Cys Ala Ser Xaa Gly Lys Xaa Cys Gly Ile Asp Asn Asp Cys Cys Asn
Thr Cys Asp Xaa Ala Arg Lys Thr Cys Thr
            20
<210>
       102
<211>
       237
<212>
       DNA
<213>
      Conus consors
<400> 102
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                                                                       60
acagctgatg actccagagg tacgcagaag catcgtgccc tgaggtcgga caccaaactc
                                                                       120
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tccatgtcga ctcgctgcaa gggtacagga aaaccatgca gtaggattgc gtataactgc

180

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tgcaccggtt cttgcagatc aggtaaatgt ggctgatcca gcgcctgatc tcccccc
                                                                      237
<210>
       103
<211>
       71
<212>
       PRT
<213> Conus consors
<400> 103
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Leu Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Gly
Thr Gly Lys Pro Cys Ser Arg Ile Ala Tyr Asn Cys Cys Thr Gly Ser
Cys Arg Ser Gly Lys Cys Gly
<210>
       104
<211>
       25
<212>
      PRT
<213> Conus consors
<220>
       PEPTIDE
<221>
<222>
       (1)..(25)
       Xaa at residue 7 is Pro or Hyp; Xaa at residue 13 is Tyr, 125I-Ty
       r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 104
Cys Lys Gly Arg Gly Lys Xaa Cys Ser Arg Ile Ala Xaa Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys 20 25
<210>
       105
<211>
       320
<212>
       DNA
<213>
       Conus consors
<400> 105
                                                                        60
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                                                                       120
acagctqatq actccaaagg tacgcagaag catcgttccc tgaggtcgac caccaaagtc
tccaaqqcqa ctgactgcat tgaagccgga aattattgcg gacctactgt tatgaaaatc
                                                                       180
                                                                       240
tgctgcggct tttgcagtcc atacagcaaa atatgtatga actatcccca aaattgatct
tocccettct gtgctctatc cttttctgcc tgagtcctcc ttacctgaga gtggtcatga
                                                                       300
                                                                       320
accactcatc acctcgtccc
       106
<210>
       78
<211>
<212>
       PRT
<213> Conus consors
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<400> 106
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Lys Gly Thr Gln Lys His Arg
Ser Leu Arg Ser Thr Thr Lys Val Ser Lys Ala Thr Asp Cys Ile Glu
Ala Gly Asn Tyr Cys Gly Pro Thr Val Met Lys Ile Cys Cys Gly Phe
Cys Ser Pro Tyr Ser Lys Ile Cys Met Asn Tyr Pro Gln Asn
   70 75
<210> 107
<211>
      36
<212> PRT
<213> Conus consors
<220>
      PEPTIDE
<221>
<222>
      (1)..(36)
      Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13,
      25 and 34 is Pro or Hyp; Xaa at residue 10, 26 and 33 is Tyr, 125
      I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
Ala Thr Asp Cys Ile Xaa Ala Gly Asn Xaa Cys Gly Xaa Thr Val Met
Lys Ile Cys Cys Gly Phe Cys Ser Xaa Xaa Ser Lys Ile Cys Met Asn
Xaa Xaa Gln Asn
       35
<210>
      108
<211>
      321
<212>
      DNA
<213>
      Conus consors
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                                                                    60
acagctgatg actccagagg tacgcagaag catcgtgccc tgaggtcgga caccaaactc
                                                                   120
tccatgtcga ctcgctgcaa aggtaaagga gcatcatgta caaggcttat gtatgactgc
                                                                   180
tgccacggtt cttgcagcag cagcaagggt agatgtggct gatccggcgc ctgatcttcc
                                                                   240
cccttctgtg ctctatcctt ttctgcctga gtcctcctta cctgagaggt ggtcatgaac
                                                                   300
                                                                    321
cactcatcac ctgctcccct g
<210>
       109
<211>
      73
<212>
       PRT
<213>
       Conus consors
<400> 109
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
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Cys Gln Leu Leu Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg 20 Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Gly Lys Gly Ala Ser Cys Thr Arg Leu Met Tyr Asp Cys Cys His Gly Ser Cys Ser Ser Ser Lys Gly Arg Cys Gly <210> 110 <211> 27 <.2.1.2> PRT <213> Conus consors <220> PEPTIDE <221> <222> (1)..(27)Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O -sulpho-Tyr or O-phospho-Tyr <400> 110 Cys Lys Gly Lys Gly Ala Ser Cys Thr Arg Leu Met Xaa Asp Cys Cys 10 His Gly Ser Cys Ser Ser Ser Lys Gly Arg Cys <210> 111 <211> 292 <212> DNA <213> Conus consors <400> 111 ggatccatga aactgacgtg catggtgatc gtcgccgtgc tgctcctgac ggcctgtcaa 60 ctcatcacag ctgatgactc cagaggtacg cagaagcatc gtgccctgag gtcggacacc 120 aaactctcca tqtcaactcq ctqcaagggt aaaggagcat catgtcatag gacttcgtat 180 240 gactgctgca ccggttcttg caacagaggt aaatgtggct gatccggcgc ctgatcttcc 292 ccettetqtq ctctateett ttetgeetga gteateeata cetgtgeteg ag <210> 112 <211> 71 <212> PRT <213> Conus consors <400> 112 Met Lys Leu Thr Cys Met Val Ile Val Ala Val Leu Leu Leu Thr Ala Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Gly Lys Gly Ala Ser Cys His Arg Thr Ser Tyr Asp Cys Cys Thr Gly Ser 55

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Cys Asn Arg Gly Lys Cys Gly
<210>
      113
<211>
       25
<212>
       PRT
       Conus consors
<220>
       PEPTIDE
<221>
<222>
       (1)..(25)
       Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulpho-Tyr or O-phospho-Tyr
<400> 113
Cys Lys Gly Lys Gly Ala Ser Cys His Arg Thr Ser Xaa Asp Cys Cys
                                     10
Thr Gly Ser Cys Asn Arg Gly Lys Cys
<210>
       114
       299
<211>
<212>
       DNA
<213>
       Conus consors
<400> 114
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                                                                        60
ctcatcacag ctgatgactc cagaggtacg cagaagcatc gtgccctgaa gtcggacacc
                                                                      120
aaactctcca tgttaacttt gcgctgcgca tcttacggaa aaccttgtgg tatttacaac
                                                                       180
                                                                      240
gactgctgca atacatgcga tccagccaga aagacatgta cgtagctgat ccggcgtctg
atcttccccc ttctgtgctc tatccttttc tgcctgagtc atccatacct gtgctcgag
                                                                       299
<210>
       115
<211>
       72
<212>
       PRT
<213>
      Conus consors
<400> 115
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Lys Ser Asp Thr Lys Leu Ser Met Leu Thr Leu Arg Cys Ala
Ser Tyr Gly Lys Pro Cys Gly Ile Tyr Asn Asp Cys Cys Asn Thr Cys
Asp Pro Ala Arg Lys Thr Cys Thr
                    70
<210>
       116
<211>
       26
<212>
       PRT
<213>
       Conus consors
<220>
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<221>
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<222>
      (1)..(26)
      Xaa at residue 7 and 20 is Pro or Hyp; Xaa at residue 4 and 11 is
<223>
       Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-pho
      spho-Tyr
<400> 116
Cys Ala Ser Xaa Gly Lys Xaa Cys Gly Ile Xaa Asn Asp Cys Cys Asn
Thr Cys Asp Xaa Ala Arg Lys Thr Cys Thr
<210>
      117
      4.3.4
< 2.1.1 >
<212>
      DNA
<213>
      Conus consors
<220>
<221>
      misc feature
<222>
      (1)...(434)
      n may be any nucleotide
<400> 117
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                                                                   60
                                                                   120
ctcatcacag ctgatgactc cagaggtacg cagaagcatc gtgccctgag gtcggacacc
aaactctcca tgtcgactcg ctgcaagggt acaggaaaac catgcagtag ggttgcgtat
                                                                   180
aactgctgca ccggttcttg cagatcaggt aaatgtggct gatccagtgc ctgatcttcc
                                                                   240
cccttctqtq ctctatcctt ttctqcctqa qtcctcctta cctqaqaqtq qtcatqaacc
                                                                   300
                                                                   360
actcatcacc tgctcctctg gaggcttcag aggagctaca ttgaaataaa agccgcattg
420
                                                                   434
aaaaaaaaa aaaa
<210>
      118
<211>
      71
<212>
      PRT
<213>
      Conus consors
<400> 118
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Gly
Thr Gly Lys Pro Cys Ser Arg Val Ala Tyr Asn Cys Cys Thr Gly Ser
Cys Arg Ser Gly Lys Cys Gly
<210>
      119
<211>
      25
<212>
      PRT
```

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<213> Conus consors
<220>
<221> PEPTIDE
<222>
      (1)..(25)
<223> Xaa at residue 7 is Pro or Hyp; Xaa at residue 13 is Tyr, 125I-Ty
       r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 119
Cys Lys Gly Thr Gly Lys Xaa Cys Ser Arg Val Ala Xaa Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 120
                                                                    - ----
<211>
       393
<212> DNA
<213> Conus consors
<400> 120
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                                                                      60
ctcatcacag ctgatgactc cagaggtacg cagaagcatc gttccctgag gtcgaccacc
                                                                     120
aaagteteea agtegaetag etgeatgaaa geegggtett attgeegete taetaegaga
                                                                     180
acctgctgcg gttattgcgc ttatttcggc aaattttgta ttgactttcc cagcaactga
                                                                     240
tetteceeet aetgtgetet atcettttet geetetgeet gagteeteet taeetgagag
                                                                     300
tggtcatgaa ccactcatca cctgctcccc tggaggcctc agaggagcta caatgaaata
                                                                     360
aaagccgcat tgcaaaaaaa aaaaaaaaaa aaa
                                                                     393
<210>
      121
<211>
      77
<212>
      PRT
<213> Conus consors
<400> 121
Met Lys Leu Thr Cys Met Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ser Leu Arg Ser Thr Thr Lys Val Ser Lys Ser Thr Ser Cys Met Lys
        35
Ala Gly Ser Tyr Cys Arg Ser Thr Thr Arg Thr Cys Cys Gly Tyr Cys
Ala Tyr Phe Gly Lys Phe Cys Ile Asp Phe Pro Ser Asn
<210>
      122
<211>
      35
<212>
      PRT
<213>
      Conus consors
<220>
<221>
      PEPTIDE
<222>
      (1)..(35)
```

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<223> Xaa at residue 33 is Pro or Hyp; Xaa at residue 10, 21 and 24 is
       Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
       pho-Tyr
<400> 122
Ser Thr Ser Cys Met Lys Ala Gly Ser Xaa Cys Arg Ser Thr Thr Arg
Thr Cys Cys Gly Xaa Cys Ala Xaa Phe Gly Lys Phe Cys Ile Asp Phe
Xaa Ser Asn
        35
<210> 123
<211> 361
<212>
       DNA
<213>
      Conus dalli
<400> 123
accaaaacca tcatcaaaat gaaactgacg tgtgtggtga tcgtcgccgt gctgttcctg
                                                                       60
                                                                      120
acqqcctqtc aactcatcac agctgatgac tccagaagta cgcagaagca tcgtgctctg
aggtcqacca tcaaacactc catgttgact aggagctgca cgcctcccgg aggaccttgt
                                                                      180
ggttattata atgactgctg cagtcatcaa tgcaatataa gcagaaataa atgcgagtag
                                                                      240
                                                                      300
ctgatccqqc atctgatctt ccccttctgt gctcgtccta acctgagagt ggtcatgaac
catcatcacc tactcctctg gaggettcag aggagetaca tggaaataaa agccgcattg
                                                                      360
                                                                      361
<210> 124
<211>
      73
<212>
      PRT
<213> Conus dalli
<400> 124
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Ser Thr Gln Lys His Arg
Ala Leu Arg Ser Thr Ile Lys His Ser Met Leu Thr Arg Ser Cys Thr
Pro Pro Gly Gly Pro Cys Gly Tyr Tyr Asn Asp Cys Cys Ser His Gln
Cys Asn Ile Ser Arg Asn Lys Cys Glu
<210>
       125
<211>
       28
      PRT
<212>
<213> Conus dalli
<220>
<221>
       PEPTIDE
<222>
       (1)..(28)
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Xaa at residue 28 is Glu or gamma-carboxy Glu; Xaa at residue 4,

<223>

5 and 8 is Pro or Hyp; Xaa at residue 11 and 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr <400> 125 Ser Cys Thr Xaa Xaa Gly Gly Xaa Cys Gly Xaa Xaa Asn Asp Cys Cys Ser His Gln Cys Asn Ile Ser Arg Asn Lys Cys Xaa <210> 126 <211> 350 <212> DNA Conus distans <213> <400> 126 accaaaacca tcatcaaaat gaaactgacg tgcgtgttga tcatcgccgt gctgttcctg 60 acqqcctqtc aactcactag aggaaagctg gagcgtcctg ttctgaggtc gagcgaccaa 120 acctccgggt caacgaagag atgcgaagat cctggtgaac cttgcggaag tgatcattcc 180 tgctgcggcg gtagttgcaa ccacaacgtc tgcgcctgaa gctggtctgg catctgacca 240 300 ttccccttct qtactctatc tctattgcct gagtcatctt tacctgtgag tggtcatgaa 350 tctctcaata ccttctcccc tggaggcttc agaagaacta gattgaaata <210> 127 <211> 66 <212> PRT <213> Conus distans <400> 127 Met Lys Leu Thr Cys Val Leu Ile Ile Ala Val Leu Phe Leu Thr Ala Cys Gln Leu Thr Arg Gly Lys Leu Glu Arg Pro Val Leu Arg Ser Ser Asp Gln Thr Ser Gly Ser Thr Lys Arg Cys Glu Asp Pro Gly Glu Pro Cys Gly Ser Asp His Ser Cys Cys Gly Gly Ser Cys Asn His Asn Val Cys Ala <210> 128 <211> 25 <212> PRT Conus distans <220> <221> PEPTIDE <222> (1)..(25)Xaa at residue 2 and 6 is Glu or gamma-carboxy Glu; Xaa at residu <223> e 4 and 7 is Pro or Hyp <400> 128 Cys Xaa Asp Xaa Gly Xaa Xaa Cys Gly Ser Asp His Ser Cys Cys Gly

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Gly Ser Cys Asn His Asn Val Cys Ala
<210>
       129
<211>
       309
<212>
      DNA
<213>
      Conus ermineus
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                                                                      120
qccacqtcqa atcqcccctq caagccgaaa ggacgaaaat gttttccgca tcagaaggac
                                                                      180
tgctgcaata aaacgtgcac cagatcaaaa tgtccctgat cttccccctt ctgtgctgta
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                                                                      309
ctctggagg
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<213> Conus ermineus
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Arg Thr Gln Lys His Arg
                                25
                                                    30
Ala Leu Arg Ser Thr Thr Lys Arg Ala Thr Ser Asn Arg Pro Cys Lys
Pro Lys Gly Arg Lys Cys Phe Pro His Gln Lys Asp Cys Cys Asn Lys
Thr Cys Thr Arg Ser Lys Cys Pro
<210> 131
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      27
<212> PRT
<213> Conus ermineus
<220>
       PEPTIDE
<221>
<222>
      (1)..(27)
<223> Xaa at residue 1, 4, 11 and 27 is Pro or Hyp
<400> 131
Xaa Xaa Lys Xaa Lys Gly Arg Lys Cys Phe Xaa His Gln Lys Asp Cys
Cys Asn Lys Thr Cys Thr Arg Ser Lys Cys Xaa
<210> 132
<211>
       308
<212> DNA
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<213> Conus ermineus

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                                                                       120
gtttatgctg cggtggatgc aatgtatcca aaagtaaatg taactagctg attcggcgtc
                                                                       180
tgaacttccc ccttctgtgc tctatccttt tctgcccgag tcctccatac ctgagaatgg
                                                                       240
                                                                       300
tcatqaacca ctcatcacct actcctctgg agacctcaga agagctacac tgaaataaaa
gcgcttgc
                                                                      .308
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_<211> 54
<212> PRT
<213> Conus ermineus
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Arg Ser Thr Thr Lys Leu Ser Met Leu Thr Arg Ala Cys Trp Ser Ser
Gly Thr Pro Cys Gly Thr Asp Ser Leu Cys Cys Gly Gly Cys Asn Val
Ser Lys Ser Lys Cys Asn
    50
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       134
<211>
       27
<212> PRT
<213> Conus ermineus
<220>
<221>
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<222>
        (1)..(27)
       Xaa at 8 residue is Pro or Hyp; Xaa at residue 3 is Trp or Bromo
<223>
<400> 134
Ala Cys Xaa Ser Ser Gly Thr Xaa Cys Gly Thr Asp Ser Leu Cys Cys
Gly Gly Cys Asn Val Ser Lys Ser Lys Cys Asn
<210>
       135
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       385
<212>
       DNA
<213>
       Conus geographus
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                                                                       120
gaacteteet tgtegaeteg etgeaagtea eeeggatett eatgtteaee gaetagttat
                                                                       180
aattgctgca ggtcttgcaa tccatacgcc aaaagatgtt acggctaatc cagcgcctga
                                                                       240
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tettececet tetgtgetet atceetteet gtetgagtee teettacetg agagtggtea

tgaaccact	c ctcac	cctact	tctctg	gagg	ctt	cgga	gga	gcta	catt	ga a	ataa	aagco	:	360
gcattgtaa	a aaaaa	aaaaa	aaaaa											385
<210> 13 <211> 73 <212> PR <213> Cor	т	ographu	s											
<400> 13 Met Lys L 1	6 eu Thr	Cys Va 5	l Val	Ile '	Val	Ala 10	Val	Leu	Leu	Leu	Thr 15	Ala		
Cys Gln L	eu Ile		a Asp	Asp :	Ser 25.	Arg	Gly -	Thr -	Gln	Lys 30	His	Arg -		
Ala Leu G 3	ly Ser 5	Thr Th	ır Glu	Leu : 40	Ser	Leu	Ser	Thr	Arg 45	Cys	Lys	Ser		
Pro Gly S 50	er Ser	Cys Se	er Pro 55	Thr	Ser	Tyr	Asn	Cys 60	Cys	Arg	Ser	Cys		
Asn Pro T	yr Ala	Lys Ar		Tyr	Gly									
<210> 13 <211> 27 <212> PR <213> Co	, RT	ographı	ıs											
<222> (1 <223> Xa ar	nd 27 i) esidue s Tyr, ospho-'	1251-	and Tyr,	21 : mone	is Pi o-iod	co oi do-T <u>i</u>	r Hyl yr, (o; Xa di-io	aa a odo-	t re: Tyr,	sidue O-su	13, lpho-	22 -Tyr
<400> 13 Cys Lys S	37 Ser Xaa	Gly So	er Ser	Cys	Ser	Xaa 10	Thr	Ser	Xaa	Asn	Cys 15	Cys		
Arg Ser (Cys Asr 20	ı Xaa X	aa Ala	Lys	Arg 25	Cys	Xaa							
<211> 39 <212> Di	38 96 NA onus ge	eograph	us											
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ctcatcac														120
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gattgctg	ca cgc	cttgctt	gtta	acag	c aa	caaa	tgta	ggc	gcta	cta	acco	agcgo	cc	240
tgatcttc	cc cct	tctgtgc	tcta	tcct	t to	tgcc	tgag	tcc	tcct	tac	ctga	aagto	gg	300
tcatgaac	ca ctc	atcacct	actt	ctctg	g ag	gctt	caga	aga	igcta	cat	tgaa	ataa	aa	360
gccgcatt	gc aat	gacaaaa	aaaa	aaaa	a aa	aaaa	L							396

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      139
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<212>
      PRT
<213>
      Conus geographus
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Ser Thr Lys Leu Thr Leu Ser Thr Arg Cys Lys Ser
Pro GTy Thr Pro Cys Ser Arg GLy Met Arg Asp Cys Cys Thr Pro Cys
    50
                        55
                                            60
Leu Leu Tyr Ser Asn Lys Cys Arg Arg Tyr
<210>
      140
<211>
      29
<212>
      PRT
<213> Conus geographus
<220>
<221>
      PEPTIDE
<222>
      Xaa at residue 4, 7 and 18 is Pro or Hyp; Xaa at residue 22 and 2
<223>
       9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O
       -phospho-Tyr
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Cys Lys Ser Xaa Gly Thr Xaa Cys Ser Arg Gly Met Arg Asp Cys Cys
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Thr Xaa Cys Leu Leu Xaa Ser Asn Lys Cys Arg Arg Xaa
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      407
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      DNA
<213>
      Conus geographus
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                                                                      120
tgactccaga ggtacgcaga agcatcgtgc cctggggtcg accaccgaac tctccttgtc
                                                                      180
gactcgctgc aagtcacccg gatcttcatg ttcaccgact agttataatt gctgcaggtc
                                                                      240
ttgcaatcca tacaccaaaa gatgttacgg ctaatccagc gcctgatctt ccctgctctg
                                                                      300
agtcctcctt acctgagagt ggtcatgaac cactcatcac ctacttctct aggcggttcg
                                                                      360
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gaggagctac attgaaataa aagccgcatt gcaaaaaaaa aaaaaaa
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      73
<212>
      PRT
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<213> Conus geographus

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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Gly Ser Thr Thr Glu Leu Ser Leu Ser Thr Arg Cys Lys Ser
Pro Gly Ser Ser Cys Ser Pro Thr Ser Tyr Asn Cys Cys Arg Ser Cys
Asn Pro Tyr Thr Lys Arg Cys Tyr Gly
   70
<210> 143
      27
<211>
<212>
      PRT
<213> Conus geographus
<220>
<221>
      PEPTIDE
<222>
      (1)..(27)
      Xaa at residue 4, 10 and 21 is Pro or Hyp; Xaa at residue 13, 22
<223>
      and 27 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr
       or O-phospho-Tyr
<400> 143
Cys Lys Ser Xaa Gly Ser Ser Cys Ser Xaa Thr Ser Xaa Asn Cys Cys
Arg Ser Cys Asn Xaa Xaa Thr Lys Arg Cys Xaa
           20
<210> 144
<211>
      28
<212>
      PRT
<213>
      Conus geographus
<220>
<221>
      PEPTIDE
<222>
      (1)..(28)
      Xaa at residue 4, 10 and 21 is Pro or Hyp; Xaa at residue 13, 22
      and 27 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr
       or O-phospho-Tyr
<400> 144
Cys Lys Ser Xaa Gly Ser Ser Cys Ser Xaa Thr Ser Xaa Asn Cys Cys
Arg Ser Cys Asn Xaa Xaa Thr Lys Arg Cys Xaa Gly
           20
                               25
<210>
      145
<211>
      26
<212>
      PRT
<213>
      Conus geographus
<220>
<221>
      PEPTIDE
<222>
      (1)..(26)
      Xaa at residue 4, 10 and 21 is Pro or Hyp; Xaa at residue 13 and
       22 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or
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O-phospho-Tyr

<400> 145 Cys Lys Ser Xaa Gly Ser Ser Cys Ser Xaa Thr Ser Xaa Asn Cys Cys Arg Ser Cys Asn Xaa Xaa Thr Lys Arg Cys <210> 146 <211> 314 <212> DNA Conus geographus <213> <400> 146 catcacaget gatgacteca gaggtaegea gaageategt geeetgaggt egtecaceaa 60 actcaccttg tcgactcgct gcaaatcacc cggaactcca tgttcaaggg gtatgcgtga 120 ttgctgcacg tcttgcttgt tatacagcaa caaatgtagg cgctactaac ccagcgcctg 180 atotteccee ttetgtgete tatteettte tgeetgagte eteettacet gaaagtggte 240 atgaaccact catcacctac ttctctggag gcttcagaag agctacattg aaataaaagc 300 314 cgcattgcaa tgac <210> 147 <211> 55 <212> PRT <213> Conus geographus <400> 147 Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg Ala Leu Arg Ser Ser Thr Lys Leu Thr Leu Ser Thr Arg Cys Lys Ser Pro Gly Thr Pro Cys Ser Arg Gly Met Arg Asp Cys Cys Thr Ser Cys Leu Leu Tyr Ser Asn Lys Cys Arg Arg Tyr <210> 148 <211> 29 <212> PRT <213> Conus geographus <220> <221> PEPTIDE <222> (1)..(29)Xaa at residue 4 and 7 is Pro or Hyp; Xaa at residue 22 and 29 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-pho spho-Tyr <400> 148 Cys Lys Ser Xaa Gly Thr Xaa Cys Ser Arg Gly Met Arg Asp Cys Cys Thr Ser Cys Leu Leu Xaa Ser Asn Lys Cys Arg Arg Xaa

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<210> 149
<211>
      29
<212> PRT
<213> Conus geographus
<220>
      PEPTIDE
<221>
<222>
       (1)..(29)
      Xaa at residue 4 and 7 is Pro or Hyp; Xaa at residue 22 and 29 is
        Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-pho
       spho-Tyr
<400> 149
Cys Lys Ser Xaa Gly Thr Xaa Cys Ser Arg Gly Met Arg Asp Cys Cys
                                                      _ 15
Thr Ser Cys Leu Ser Xaa Ser Asn Lys Cys Arg Arg Xaa
<210>
      150
<211>
      380
<212>
      DNA
      Conus laterculatus
<213>
<400> 150
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                                                                      120
                                                                      180
aggtcgacca ccaatctctc catgctgact cggaagtgct ggccttccgg aagctattgt
                                                                      240
cgtgcgaata gtaaatgctg cagtggatgc gatcggaaca gaaataaatg ttactagctg
attcggcgtc tgaacttcct ccttctgtgc tctatccttt tctgcccgag tcctccatac
                                                                      300
ctgagagtgg tcatgaacca ctcaactcct actcctctgg aggcctcaga agagctacat
                                                                      360
                                                                      380
tgaaataaaa gccgcattgc
<210>
       151
       72
<211>
<212>
       PRT
      Conus laterculatus
<213>
<400> 151
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Thr Thr Asn Leu Ser Met Leu Thr Arg Lys Cys Trp
Pro Ser Gly Ser Tyr Cys Arg Ala Asn Ser Lys Cys Cys Ser Gly Cys
Asp Arg Asn Arg Asn Lys Cys Tyr
<210> 152
<211>
      27
<212>
      PRT
      Conus laterculatus
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<220>
<221>
      PEPTIDE
<222>
       (1)..(27)
      Xaa at residue 4 is Pro or Hyp; Xaa at residue 3 is Trp or Bromo
       Trp; Xaa at residue 8 and 27 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
       iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
Lys Cys Xaa Xaa Ser Gly Ser Xaa Cys Arg Ala Asn Ser Lys Cys
Ser Gly Cys Asp Arg Asn Arg Asn Lys Cys Xaa
<210>
      153
<211->
      -367-
<212>
      DNA
      Conus laterculatus
<213>
<400> 153
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acqqcctqtc aactcatcac agctgatgac tccagaggta cgcagaagca tcgtgccctg
                                                                      120
aggtcgacca ccaaactete catategact egetgeette eteceggate atattgtaag
                                                                      180
gcgacaacgg aagtctgctg ctcttcttgc cttcaattcg ctcagatatg ttcgggttga
                                                                      240
                                                                      300
tettecetet tetgtgetet atcettttet geetgagtee tecatacetg agaatggtea
tgaaccactc aacatctact cctctggagg cctcagaaga gctatattga aataaaagcc
                                                                      360
                                                                      367
gcattgc
<210>
      154
<211>
      73
<212>
      PRT
      Conus laterculatus
<213>
<400> 154
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Thr Thr Lys Leu Ser Ile Ser Thr Arg Cys Leu Pro
Pro Gly Ser Tyr Cys Lys Ala Thr Thr Glu Val Cys Cys Ser Ser Cys
Leu Gln Phe Ala Gln Ile Cys Ser Gly
<210>
      155
<211>
       27
      PRT
<212>
<213> Conus laterculatus
<220>
<221>
      PEPTIDE
<222>
      (1)..(27)
      Xaa at residue 13 is Glu or gamma-carboxy Glu; Xaa at residue 3 a
```

nd 4 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr <400> 155 Cys Leu Xaa Xaa Gly Ser Xaa Cys Lys Ala Thr Thr Xaa Val Cys Cys Ser Ser Cys Leu Gln Phe Ala Gln Ile Cys Ser <210> 156 <211> 373 <212> DNA <213> Conus laterculatus <400> 156 accaaaacca tcatcaaaat gaaactgacg tgtgtggtga tcgtcgccgt gctgctcctg 60 acqqcctqtc aactcatcac agctgatgac tccagaggta cgcagaagca tcgtgccctg 120 aggtcgacca ccaatctctc catgtcgact cgctgcaagt ctcccggatc atcatgtagc 180 240 gtgtctatgc gtaactgctg cacttcttgc aattcacgca ccaagaaatg tacgcgacgt qqctqaactt ccccttctq tgctctatcc ttttctgccc gagtcctcca tacctgagag 300 360 tggtcatgaa ccactcaaca tctactcctc tggaggcctc agaagagcta tattgaaata 373 aaagccgcat tgc <210> 157 <211> 75 <212> PRT <213> Conus laterculatus <400> 157 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg Ala Leu Arg Ser Thr Thr Asn Leu Ser Met Ser Thr Arg Cys Lys Ser Pro Gly Ser Ser Cys Ser Val Ser Met Arg Asn Cys Cys Thr Ser Cys Asn Ser Arg Thr Lys Lys Cys Thr Arg Arg Gly 70 <210> 158 <211> 29 <212> PRT <213> Conus laterculatus <220> <221> PEPTIDE (1)..(29)<222> Xaa at residue 3 is Pro or Hyp <400> 158 Cys Lys Ser Xaa Gly Ser Ser Cys Ser Val Ser Met Arg Asn Cys Cys

10

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<211>
      330
<212> DNA
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                                                                     120
aggtcgacaa ccaaactctc catgctgact cggacctgct ggccttccgg aacagcttgt
                                                                     180
qqtattqata qtaactqctq caqtqqatqc aatqtatcca qaaqtaaatq taactaqctq
                                                                     240
                                                                     300
atteggegte taaactteet cettetgeet gagteeteea taeetgagag tggteatgaa
ccacatcatc acctcatctc tggaggcctc
                                                                     330
<210> 160
<211>
      72
<212> PRT
<213> Conus laterculatus
<400> 160
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Thr Thr Lys Leu Ser Met Leu Thr Arg Thr Cys Trp
Pro Ser Gly Thr Ala Cys Gly Ile Asp Ser Asn Cys Cys Ser Gly Cys
Asn Val Ser Arg Ser Lys Cys Asn
<210> 161
<211> 27
<212> PRT
<213> Conus laterculatus
<220>
<221>
      PEPTIDE
<222>
      (1)..(27)
      Xaa at residue 4 is Pro or Hyp; Xaa at residue 3 is Trp or Bromo
       Trp
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Thr Cys Xaa Xaa Ser Gly Thr Ala Cys Gly Ile Asp Ser Asn Cys Cys
Ser Gly Cys Asn Val Ser Arg Ser Lys Cys Asn
<210>
      162
<211>
      363
<212>
      DNA
<213> Conus laterculatus
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                                                                      120
aggtcgacca ccaatctctc catgctgact cggaagtgct ggccttccgg aagctattgt
                                                                      180
cgtgcgaata gtaaatgctg cagtggatgc gatcggaaca gaagtaaatg taactagctg
                                                                      240
attcggcgtc taaacttcct ccttctgcct gagtcctcca tacctgagag tggtcatgaa
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ccactcatca cctactcctc tggaggcctc aaaggagcta cattgaaata aaagccgcat
                                                                      360
tqc
                                                                      363
<210> 163
<211>
       72
<212>
       PRT
<213> Conus laterculatus
<400> 163
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Thr Thr Asn Leu Ser Met Leu Thr Arg Lys Cys Trp
Pro Ser Gly Ser Tyr Cys Arg Ala Asn Ser Lys Cys Cys Ser Gly Cys
Asp Arg Asn Arg Ser Lys Cys Asn
<210>
      164
<211>
      27
<212>
      PRT
<213>
      Conus laterculatus
<220>
<221>
      PEPTIDE
<222>
      (1)..(27)
      Xaa at residue4 is Pro or Hyp; Xaa at residue 3 is Trp or Bromo
       Trp; Xaa at residue 8 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Ty
       r, O-sulpho-Tyr or O-phospho-Tyr
<400> 164
Lys Cys Xaa Xaa Ser Gly Ser Xaa Cys Arg Ala Asn Ser Lys Cys
                                    10
Ser Gly Cys Asp Arg Asn Arg Ser Lys Cys Asn
<210>
      165
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       391
<212>
      DNA
<213>
      Conus leopardus
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      misc_feature
<222>
      (1)..(391)
<223>
      n may be any nucleotide
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                                                                      120
tccaggtcgc tctttgagtg cgcgccttcc ggtggacgtt gtggtttttt aaagtcctgc
                                                                      180
tgcqaaqqat attgcgatgg ggaaagcact tcatgtgtga gtggcccata cagcatctga
                                                                      240
tettecegee tteagtgete tateetttte tgeetgagte etceatacet etgageggte
                                                                      300
atgaaccact caacacctac teetetggag getteaggga actatattaa aataaageeg
                                                                      360
                                                                      391
cattgcaacg aaanaaaaaa aaaaaaaaa a
<210>
       166
<211>
       79
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      PRT
      Conus leopardus
<213>
<400> 166
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Cys Gln Leu Thr Thr Ala Asp Ile Ser Arg Gly Thr Arg Lys Arg Arg
Ala Leu Arg Ser Thr Thr Lys Leu Ser Arg Ser Leu Phe Glu Cys Ala
Pro Ser Gly Gly Arg Cys Gly Phe Leu Lys Ser Cys Cys Glu Gly Tyr
Cys Asp Gly Glu Ser Thr Ser Cys Val Ser Gly Pro Tyr Ser Ile
<210>
      167
<211>
      37
<212>
      PRT
<213>
      Conus leopardus
<220>
<221>
       PEPTIDE
<222>
       Xaa at residue 4, 20 and 26 is Glu or gamma-carboxy Glu; Xaa at r
       esidue 7 and 34 is Pro or Hyp; Xaa at residue 22 and 35 is Tyr,
       125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
       yr
<400> 167
Ser Leu Phe Xaa Cys Ala Xaa Ser Gly Gly Arg Cys Gly Phe Leu Lys
Ser Cys Cys Xaa Gly Xaa Cys Asp Gly Xaa Ser Thr Ser Cys Val Ser
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Gly Xaa Xaa Ser Ile
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<211>
       365
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      DNA
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<213> Conus leopardus

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teccegtgge eettggaetg caeggeteee agteaacett gtggttattt teetaggtge
                                                                      180
tgtggacatt gcgatgtacg cagggtatgt acgagtggct gatccggcgt ctgatctttc
                                                                      240
egeettetgt getgtateet titetgeetg agteeteeat accegtgagt ggteatgaae
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cactcaacac ctactcctct ggaggcttca gaggaactat attaaaataa agccgcattg
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                                                                      365
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<211>
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<213>
      Conus leopardus
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Cys Gln Leu Thr Thr Ala Asp Ile Ser Arg Gly Thr Trp Lys His Arg
Gly Val Gly Ser Thr Thr Gly Leu Ser Pro Trp Pro Leu Asp Cys Thr
Ala Pro Ser Gln Pro Cys Gly Tyr Phe Pro Arg Cys Cys Gly His Cys
Asp Val Arg Arg Val Cys Thr Ser Gly
<210>
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      30
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      PRT
      Conus leopardus
<213>
<220>
      PEPTIDE
<221>
<222>
       (1)..(30)
      Xaa at residue 2, 8, 11 and 16 is Pro or Hyp; Xaa at residue 1 is
<223>
        Trp or Bromo Trp; Xaa at residue 14 is Tyr, 125I-Tyr, mono-iodo-
       Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Arg Cys Cys Gly His Cys Asp Val Arg Arg Val Cys Thr Ser
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       DNA
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tocaggtogo cototaggtg catgtotoco ggtggaattt gtggtgattt tggtgactgo
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tgcgaaattt gcaatgtgta cggtatatgt gtgagtgact tacccggcat ctgatctttc
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cgccttctgt gctctatcct tttctgcctg agtcctccat acccctgagt ggtcatggac
                                                                      300
cactcaacac ctactcctct ggaggcttca gaggaactac attaaaataa agccgcattg
                                                                      360
caaaaaaaa aaaaaaaaa a
                                                                      381
<210>
       172
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      PRT
<213>
      Conus leopardus
<400> 172
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala
Cys Gln Leu Thr Thr Ala Asp Ile Ser Arg Gly Thr Arg Lys His Arg
Ala Leu Arg Ser Thr Thr Lys Leu Ser Arg Ser Pro Ser Arg Cys Met
Ser Pro Gly Gly Ile Cys Gly Asp Phe Gly Asp Cys Cys Glu Ile Cys
Asn Val Tyr Gly Ile Cys Val Ser Asp Leu Pro Gly Ile
                    70
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      173
<211>
      31
<212> PRT
<213> Conus leopardus
<220>
<221>
      PEPTIDE
<222>
       (1)..(31)
<223>
       Xaa at residue 16 is Glu or gamma-carboxy Glu; Xaa at residue 4 a
       nd 29 is Pro or Hyp; Xaa at residue 21 is Tyr, 125I-Tyr, mono-iod
       o-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 173
Cys Met Ser Xaa Gly Gly Ile Cys Gly Asp Phe Gly Asp Cys Cys Xaa
Ile Cys Asn Val Xaa Gly Ile Cys Val Ser Asp Leu Xaa Gly Ile
<210>
       174
<211>
       404
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       DNA
<213>
      Conus leopardus
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acagctgatg attccagagg tacacggaag catcgtgctc tgaggtcaac caccaaactc
                                                                      120
tecaggtgge ceaggtactg egegeetece ggtggagett gtgggttttt tgateactge
                                                                      180
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tgcggatatt gcgaaacgtt ttacaatacg tgtagatgag ttggctgatc cggcgcttga

totttccgcc ttctgttgct ctatcttttt ctgcctgagt cctcccatac cccgttgagt 300
ggtccatgaa ccactccaac acctactccc tccttggaag cttccaaagg aaacgacatt 360
taaaataaat tccccattgc aattggaaaa aaaaaaaaaa
<210> 175 <211> 72 <212> PRT <213> Conus leopardus
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Cys Gln Leu Thr Thr Ala Asp Asp Ser Arg Gly Thr Arg Lys His Arg 20 25 30
Ala Leu Arg Ser Thr Thr Lys Leu Ser Arg Trp Pro Arg Tyr Cys Ala 35 40 45
Pro Pro Gly Gly Ala Cys Gly Phe Phe Asp His Cys Cys Gly Tyr Cys 50 55
Glu Thr Phe Tyr Asn Thr Cys Arg 65 70
<210> 176 <211> 27 <212> PRT <213> Conus leopardus
<pre><220> <221> PEPTIDE <222> (1)(27) <223> Xaa at residue 20 is Glu or gamma-carboxy Glu; Xaa at residue 4 a nd 5 is Pro or Hyp; Xaa at residue 1, 18 and 23 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr</pre>
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Gly Xaa Cys Xaa Thr Phe Xaa Asn Thr Cys Arg 20 25
<210> 177 <211> 292 <212> DNA <213> Conus lynceus
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tocatgtoga otogotgoaa gtotocogga toaccatgta gtgtgacato gtataactgo 180
tgcacttttt gctcttcata cactaagaaa tgtcgggcct ctttatgaac cactcatcac 240
ctactcctct ggaggcctca gaagagctac actgaaataa aagccgcatt gg 292

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<213> Conus lynceus
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Arg Thr Gln Lys His Arg
                                25
Ala Leu Arg Ser Thr Thr Asn Leu Ser Met Ser Thr Arg Cys Lys Ser
Pro Gly Ser Pro Cys Ser Val Thr Ser Tyr Asn Cys Cys Thr Phe Cys
                                            60
Ser Ser Tyr Thr Lys Lys Cys Arg Ala Ser Leu
                    70
<210> 179
<211>
      30
<212> PRT
<213> Conus lynceus
<220>
<221>
       PEPTIDE
<222>
      (1)..(30)
      Xaa at residue 4 and 7 is Pro or Hyp; Xaa at residue 13 and 22 is
<223>
       Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-pho
       spho-Tyr
<400> 179
Cys Lys Ser Xaa Gly Ser Xaa Cys Ser Val Thr Ser Xaa Asn Cys Cys
                                                        15
Thr Phe Cys Ser Ser Xaa Thr Lys Lys Cys Arg Ala Ser Leu
<210>
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<213> Conus lynceus
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                                                                     120
tccatgtata ctcgctgcgc aggtccagga gcaatttgtc ctaatagggt atgctgcggt
                                                                     180
tattgcagta aaagaacaca tctatgtcat tcgcgaactg gctgatcttc ccccttctgt
                                                                     240
gctctatcct ttttctgcct gagtcctcca tacctgagaa tggtcatgaa ccactcatca
                                                                     300
                                                                     355
cctactcctc ttggagacct cagaggagct acactgaaat aaaagccgca ttggc
<210>
       181
<211>
       74
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       PRT
<213> Conus lynceus
<400> 181
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
            20
                                 25
                                                     30
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Pro Gly Ala Ile Cys Pro Asn Arg Val Cys Cys Gly Tyr Cys Ser Lys
Arg Thr His Leu Cys His Ser Arg Thr Gly
<210> 182
<211>
       28
<212> PRT
<213>
      Conus lynceus
<220>
<221>
      PEPTIDE
<222>
      (1)..(28)
      Xaa at residue 4 and 9 is Pro or Hyp; Xaa at residue 16 is Tyr, 1
       25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
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Cys Ala Gly Xaa Gly Ala Ile Cys Xaa Asn Arg Val Cys Cys Gly Xaa
Cys Ser Lys Arg Thr His Leu Cys His Ser Arg Thr
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       183
<211>
       361
<212>
       DNA
<213> Conus lynceus
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cacgctgatg actccagagg tacgcagaag actgctqccc gaggtcgacc accaaaactc
                                                                      120
tecatgetga etegggeetg etggtettee ggaacacett gtggtaetga tagtttatge
                                                                      180
tgcggtggat gcaatgtatc caaaagtaaa tgtaactagc tgattcgqcg tctqaacttc
                                                                      240
ccccttctgt gctctatcct tttctgcccg agtcctccat acctgagaat ggtcatgaac
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cactcatcac ctactcctct ggagacctca gaagagctac actgaaataa aagcgcattg
                                                                      360
                                                                      361
<210>
       184
<211>
      72
<212>
      PRT
<213>
      Conus lynceus
<400> 184
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Ala Ala
Cys Gln Leu Leu His Ala Asp Asp Ser Arg Gly Thr Gln Lys Thr Ala
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Ala Arg Gly Arg Pro Pro Lys Leu Ser Met Leu Thr Arg Ala Cys Trp

35 40 45 Ser Ser Gly Thr Pro Cys Gly Thr Asp Ser Leu Cys Cys Gly Gly Cys 50 60 Asn Val Ser Lys Ser Lys Cys Asn <210> 185 <211> 27 <212> PRT <213> Conus lynceus <220> <221> PEPTIDE <222> (1)...(27)Xaa at residue 8 is Pro or Hyp; Xaa at residue 3 is Trp or Bromo Trp <400> 185 Ala Cys Xaa Ser Ser Gly Thr Xaa Cys Gly Thr Asp Ser Leu Cys Cys Gly Gly Cys Asn Val Ser Lys Ser Lys Cys Asn <210> 186 <211> 364 <212> DNA <213> Conus lynceus <400> 186 atgaaactga cgtgtgtggt gatcgtcgcc gagctactcc taacggcctg tcaactcatc 60 acagctgatg actccagagg tacgcagaag catcgtgccc tgaggtcgac caccaatctc 120 tecatgetga eteggaagtg etggteteee ggaacetatt gtegtgegea tagtaaatge 180 tgccgtggat gcgatcagaa cagaaataaa tgttactagc tgattcggcg tctgaacttc 240 ctccttctgt gctctatcct ttttctgcct gagtcctcca tacctgagaa tggtcatgaa 300 ccactcatca cctactcctc tggaggcctc agaggagcct acactgaaat aaaagccgca 360 ttgg 364 <210> 187 <211> 72 <212> PRT <213> Conus lynceus <400> 187 Met Lys Leu Thr Cys Val Val Ile Val Ala Glu Leu Leu Thr Ala Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg Ala Leu Arg Ser Thr Thr Asn Leu Ser Met Leu Thr Arg Lys Cys Trp 35 Ser Pro Gly Thr Tyr Cys Arg Ala His Ser Lys Cys Cys Arg Gly Cys 55 60

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 <210>
        188
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        27
 <212>
       PRT
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<220>
<221>
       PEPTIDE
<222>
       (1)..(27)
       Xaa at residue 5 is Pro or Hyp; Xaa at residue 3 is Trp or Bromo
       Trp; Xaa at residue 8 and 27 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
       iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Lys Cys Xaa Ser Xaa Gly Thr Xaa Cys Arg Ala His Ser Lys Cys Cys
Arg Gly Cys Asp Gln Asn Arg Asn Lys Cys Xaa
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       189
<211>
       318
<212>
       DNA
<213>
       Conus magus
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                                                                     120
aggtcggaca ccaaactctc catgtcgact cgctgcaagg gtacaggaaa accatgcagt
                                                                     180
aggattgcgt ataactgctg caccggttct tgcagatcag gtaaatgtgg ctgatccagt
                                                                     240
gcctgatett ecceettetg tgetetatee tttttetgee tgagteetee ttacetgaga
                                                                     300
gtggtcatga accactca
                                                                     318
<210>
       190
<211>
       71
<212>
      PRT
<213>
      Conus magus
<400> 190
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Gly
Thr Gly Lys Pro Cys Ser Arg Ile Ala Tyr Asn Cys Cys Thr Gly Ser
Cys Arg Ser Gly Lys Cys Gly
<210>
      191
<211>
      25
<212>
      PRT
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<213> Conus magus
 <220>
 <221> PEPTIDE
 <222>
        (1)..(25)
 <223> Xaa at residue 7 is Pro or Hyp; Xaa at residue 13 is Tyr, 125I-Ty
        r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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 Cys Lys Gly Thr Gly Lys Xaa Cys Ser Arg Ile Ala Xaa Asn Cys Cys
 Thr Gly Ser Cys Arg Ser Gly Lys Cys
 <210> 192
 <211>
        259
 <212>
        DNA
 <213> Conus magus
 <400> 192
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                                                                      120
aagtcggaca ccaaactctc catgttaact ttgcgctgcg catcttacgg aaaaccttgt
                                                                      180
ggtatttaca acgactgctg caatacatgc gatccagcca gaaagacatg tacgtagctg
                                                                      240
atccggcgtc tgatcttcc
                                                                      259
<210>
       193
<211>
       72
<212>
       PRT
<213> Conus magus
<400> 193
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Lys Ser Asp Thr Lys Leu Ser Met Leu Thr Leu Arg Cys Ala
Ser Tyr Gly Lys Pro Cys Gly Ile Tyr Asn Asp Cys Cys Asn Thr Cys
Asp Pro Ala Arg Lys Thr Cys Thr
<210>
       194
<211>
       26
<212>
       PRT
<213>
      Conus magus
<220>
<221>
      PEPTIDE
<222>
       (1)..(26)
      Xaa at residue 7 and 20 is Pro or Hyp; Xaa at residue 4 and 11 is
<223>
       Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-pho
       spho-Tyr
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Thr Cys Asp Xaa Ala Arg Lys Thr Cys Thr
<210>
      195
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       254
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       DNA
<213>
      Conus magus
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cogtgotgot cotgacggoo tgtoaactca tcacagotga tgactccaga ggtacgcaga
                                                                      120
agcategtge cetgaggteg gacaceaaac tetecatgte aactegetge aagggtaaag
                                                                      180
gagcatcatg tcataggact tcgtatgact gctgcaccgg ttcttgcaac agaggtaaat
                                                                      240
                                                                      254
ttggctgatc cgcc
<210>
      196
<211>
       71
<212>
      PRT
<213> Conus magus
<400> 196
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
                                25
                                                    30
Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Gly
Lys Gly Ala Ser Cys His Arg Thr Ser Tyr Asp Cys Cys Thr Gly Ser
Cys Asn Arg Gly Lys Phe Gly
<210> 197
<211> 25
<212> PRT
<213> Conus magus
<220>
<221>
      PEPTIDE
<222>
      (1)..(25)
      Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulpho-Tyr or O-phospho-Tyr
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Cys Lys Gly Lys Gly Ala Ser Cys His Arg Thr Ser Xaa Asp Cys Cys
Thr Gly Ser Cys Asn Arg Gly Lys Cys
<210> 198
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<211>

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<213> Conus miles
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                                                                     120
qacaaacacc tcaggttgac caagcgttgc aatgatcgcg gtggaggttg cagtcaacat
                                                                     180
cctcactgct gcggtggaac ttgcaataag cttattggcg tatgtctgta aagctggtct
                                                                     240
qccqtctqat attccctttc tgtgcttcat cctcttttgc ctgagtcatc catacctgtg
                                                                     300
                                                                     358
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      199
<211>
       74
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<213> Conus miles
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Arg Ala Leu Arg Pro Ala Asp Lys His Leu Arg Leu Thr Lys Arg Cys
Asn Asp Arg Gly Gly Cys Ser Gln His Pro His Cys Cys Gly Gly
Thr Cys Asn Lys Leu Ile Gly Val Cys Leu
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      200
<211>
      27
<212>
      PRT
<213>
      Conus arenatus
<220>
      PEPTIDE
<221>
<222>
      (1)..(27)
      Xaa at residue 12 is Pro or Hyp
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Gly Thr Cys Asn Lys Leu Ile Gly Val Cys Leu
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       292
<212>
       DNA
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      Conus monachus
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aggtcggaca ccaaactctc catatcgact cgctgcaagt ctacaggaaa atcatgcagt
                                                                        180
  aggattgcgt ataactgctg caccggttct tgcagatcag gtaaatgtgg ctgatccagc
                                                                        240
  gcctgatett cccccttctg tgctctatcc ttttctgcct gagtcctcct ta
                                                                        292
  <210>
         202
  <211>
         71
  <212>
         PRT
  <213>
        Conus monachus
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- Cys Gln Leu He Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
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 Ala Leu Arg Ser Asp Thr Lys Leu Ser Ile Ser Thr Arg Cys Lys Ser
 Thr Gly Lys Ser Cys Ser Arg Ile Ala Tyr Asn Cys Cys Thr Gly Ser
 Cys Arg Ser Gly Lys Cys Gly
 <210>
        203
 <211>
        25
 <212>
        PRT
 <213> Conus monachus
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 <221>
        PEPTIDE
 <222>
        (1)..(25)
        Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
        -sulpho-Tyr or O-phospho-Tyr
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 Thr Gly Ser Cys Arg Ser Gly Lys Cys
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        204
 <211>
        258
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       DNA
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       Conus monachus
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                                                                       120
 aggtcggaca ccaacctctc catgtcgact cgctgcaagg gtaaaggatc ttcatgtagt
                                                                       180
 aggaccatgt ataactgctg caccggttct tgcaacagag gtaaatgtgg ctgatccagc
                                                                       240
 gcctgatctt cccccttc
                                                                       258
 <210>
        205
 <211>
        71
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<212>

PRT

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<213> Conus monachus
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Met Lys Leu Thr Ser Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Asp Thr Asn Leu Ser Met Ser Thr Arg Cys Lys Gly
Lys Gly Ser Ser Cys Ser Arg Thr Met Tyr Asn Cys Cys Thr Gly Ser
Cys Asn Arg Gly Lys Cys Gly
<210>
       206
<211>
       25
<212>
       PRT
<213>
      Conus monachus
<220>
<221>
       PEPTIDE
<222>
       (1)..(25)
       Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulpho-Tyr or O-phospho-Tyr
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Cys Lys Gly Lys Gly Ser Ser Cys Ser Arg Thr Met Xaa Asn Cys Cys
                                     10
Thr Gly Ser Cys Asn Arg Gly Lys Cys
<210>
       207
<211>
       258
<212>
       DNA
<213>
       Conus obscurus
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                                                                       120
ccccaaaact gatcttcccc cttctgtgct ctatcctttt ctgtccgagt cctcctgacc
                                                                       180
tgagagtggt catgaaccac tcatcaccta cccctctggg gcttcacagg atctacattg
                                                                       240
aaataaaagc cgcattgc
                                                                       258
<210>
       208
<211>
       39
<212>
       PRT
<213>
      Conus obscurus
<400> 208
Leu Leu Asp Arg Ser Pro Pro Cys Met Lys Gly Gly Ser Ser Cys Arg
Gly Thr Thr Gly Val Cys Cys Gly Phe Cys Ser Asp Phe Gly Tyr Lys
            20
                                 25
                                                     30
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Cys Arg Asp Tyr Pro Gln Asn
        35
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       209
<211>
       35
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       PRT
<213>
       Conus obscurus
<220>
<221>
       PEPTIDE
<222>
       (1)..(35)
<223>
       Xaa at residue 2, 3 and 33 is Pro or Hyp; Xaa at residue 27 and 3
       2 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O
       -phospho-Tyr
<400> 209
Ser Xaa Xaa Cys Met Lys Gly Gly Ser Ser Cys Arg Gly Thr Thr Gly
Val Cys Cys Gly Phe Cys Ser Asp Phe Gly Xaa Lys Cys Arg Asp Xaa
Xaa Gln Asn
        35
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       210
<211>
       259
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                                                                       120
tocagoggtt gatetteete eetetgtget eeateetttt etgeetgagt teteettace
                                                                       180
tgagagtggt catgaaccac tcatcaccta ctcttctgga ggcttcagag gagctacatt
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gaaataaaag ccgcattgc
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       32
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<213>
       Conus obscurus
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Arg Ser Thr Arg Cys Leu Pro Asp Gly Thr Ser Cys Leu Phe Ser Arg
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Ile Arg Cys Cys Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
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       28
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       PRT
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       Conus monachus
<220>
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       (1)..(28)
       Xaa at residue 3 is Pro or Hyp
<400>
      212
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Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
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       n may be any nucleotide
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                                                                       120
aactccaagt tgactaggca gtgctcgcct aacggtggat cttgttctcg tcattttcac
                                                                       180
tgctgcagcc tctattgcaa taaaaatact ggcgtatgta ttgcaaccta atacccqtqt
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                                                                       300
aaaactgcat tgcnttgacc aaaaaaaaaa
                                                                       330
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       76
<212>
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<213> Conus pulicarius
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Cys Gln Leu Ile Thr Ala Glu Thr Tyr Ser Arg Gly Lys Gln Lys His
Arg Ala Leu Arg Ser Thr Asp Lys Asn Ser Lys Leu Thr Arg Gln Cys
Ser Pro Asn Gly Gly Ser Cys Ser Arg His Phe His Cys Cys Ser Leu
Tyr Cys Asn Lys Asn Thr Gly Val Cys Ile Ala Thr
<210>
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       30
<212>
       PRT
<213>
       Conus pulicarius
<220>
<221>
       PEPTIDE
<222>
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      Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 4 is Pro or H
       yp; Xaa at residue 19 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Ty
       r, O-sulpho-Tyr or O-phospho-Tyr
<400> 215
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Xaa Cys Ser Xaa Asn Gly Gly Ser Cys Ser Arg His Phe His Cys Cys

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1
                                         10
                                                             15
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    <211>
          282
    <212>
          DNA
   <213>
          Conus purpurascens
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   acagctgatg actccagacg tacgcagaag catcgtgccc tgaggtcgac caccaaaggc
                                                                          120
--- gecaegtega ategeceety caayacaeee ggaegaaaat gtttteegea teagaaggae
                                                                          180
   tgctgcggtc gagcgtgcat catcacaata tgtccctgat cttccccctt ctgtgctgta
                                                                          240
   tccttttctg cctgagtctc cttacctgag agtggtcatg aa
                                                                          282
   <210>
          217
   <211>
          72
   <212>
          PRT
   <213>
          Conus purpurascens
   <400> 217
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   Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Arg Thr Gln Lys His Arg
               20
   Ala Leu Arg Ser Thr Thr Lys Gly Ala Thr Ser Asn Arg Pro Cys Lys
   Thr Pro Gly Arg Lys Cys Phe Pro His Gln Lys Asp Cys Cys Gly Arg
   Ala Cys Ile Ile Thr Ile Cys Pro
   <210>
         218
   <211>
         27
   <212>
         PRT
   <213> Conus purpurascens
  <220>
  <221>
         PEPTIDE
  <222>
         (1)..(27)
  <223>
         Xaa at residue 1, 5, 11 and 27 is Pro or Hyp
  <400> 218
  Xaa Cys Lys Thr Xaa Gly Arg Lys Cys Phe Xaa His Gln Lys Asp Cys
  Cys Gly Arg Ala Cys Ile Ile Thr Ile Cys Xaa
  <210>
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         340
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         DNA
  <213> Conus purpurascens
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                                                                           120
aggtcgacca ccaaactctt cacgtcgaaa agctgcaagc ttcccggagc atattgtaat
                                                                           180
gcagaagatt atgactgctg ccttagatgc aaagttggag gtacatgtgg ctgatccagt
                                                                           240
gcctgatctt cccccttctg tgctctatcc ttttctgcct gagtcctcct tacctaagag
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                                                                          340
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        PRT
<213>
       Conus purpurascens
<400>
        220
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Thr Thr Lys Leu Phe Thr Ser Lys Ser Cys Lys Leu
Pro Gly Ala Tyr Cys Asn Ala Glu Asp Tyr Asp Cys Cys Leu Arg Cys
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Lys Val Gly Gly Thr Cys Gly
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       26
<212>
       PRT
<213>
      Conus purpurascens
<220>
<221>
       PEPTIDE
<222>
       (1)..(26)
       Xaa at residue 12 is Glu or gamma-carboxy Glu; Xaa at residue 5 i s Pro or Hyp; Xaa at residue 8 and 14 is Tyr, 125I-Tyr, mono-iodo
       -Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 221
Ser Cys Lys Leu Xaa Gly Ala Xaa Cys Asn Ala Xaa Asp Xaa Asp Cys
                                                            15
Cys Leu Arg Cys Lys Val Gly Gly Thr Cys
<210>
       222
<211>
       317
<212>
       DNA
<213>
       Conus purpurascens
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                                                                          120
gccacgtcga atcgcccctg caagaaaacc ggacgaaaat gttttccgca tcagaaggac
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tgctgcggtc gagcgtgcat catcacaata tgtccctgat cttccccctt ctgtgctgta
                                                                      240
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                                                                      300
ctctggaggc ttcagag
                                                                      317
<210>
      223
<211>
       72
<212>
      PRT
<213>
      Conus purpurascens
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Cys Glm Leu Ile-Thr Ala-Asp Asp Ser Arg Arg Thr Gln Lys His Arg
            20
Ala Leu Arg Ser Thr Thr Lys Arg Ala Thr Ser Asn Arg Pro Cys Lys
Lys Thr Gly Arg Lys Cys Phe Pro His Gln Lys Asp Cys Cys Gly Arg
Ala Cys Ile Ile Thr Ile Cys Pro
<210>
      224
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      27
<212>
      PRT
<213> Conus purpurascens
<220>
<221>
      PEPTIDE
<222>
      (1) ...(27)
<223> Xaa at residue 1, 11 and 27 is Pro or Hyp
<400> 224
Xaa Cys Lys Lys Thr Gly Arg Lys Cys Phe Xaa His Gln Lys Asp Cys
Cys Gly Arg Ala Cys Ile Ile Thr Ile Cys Xaa
<210>
      225
<211>
       328
<212>
      DNA
<213>
      Conus radiatus
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                                                                      120
atcacagetg atgactecag aggtatgeag aaacateatg ceetggggte gateageagt
                                                                      180
ctctttaagt cgacccgtca tggctgcaaa cccctcaaac gtcgttgttt caatgataaa
                                                                      240
qaatqctqca qcaaattttq caattcaqtc cqaaaqcaqt qtqqataaat qqctaaaaaa
                                                                      300
ctgaataaaa gccgcattgc aaaaaaaa
                                                                      328
<210>
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<211>

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<213> Conus radiatus
<400> 226
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Ala Leu Gly Ser Ile Ser Ser Leu Phe Lys Ser Thr Arg His Gly Cys
Lys Pro Leu Lys Arg Arg Cys Phe Asn Asp Lys Glu Cys Cys Ser Lys
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Phe Cys Asn Ser Val Arg Lys Gln Cys Gly
                   70
<210> 227
<211> 28
<212> PRT
<213> Conus radiatus
<220>
<221>
      PEPTIDE
<222>
      (1)..(28)
      Xaa at residue 15 is Glu or gamma-carboxy Glu; Xaa at residue 5 i
      s Pro or Hyp
<400> 227
His Gly Cys Lys Xaa Leu Lys Arg Arg Cys Phe Asn Asp Lys Xaa Cys
Cys Ser Lys Phe Cys Asn Ser Val Arg Lys Gln Cys
<210>
      228
<211>
      250
<212>
      DNA
<213>
      Conus radiatus
<400> 228
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atcacagetg atgactecag aggtatgeag aaacateatg ceetggggte gateageagt
                                                                     120
ctctttaagt cgacccgtcg tggctgcaaa cccctcaaac gtcgttgttt caatgataaa
                                                                     180
                                                                     240
gaatgctgca gcaaattttg caattcagtc cgaaaccagt gtggataaat ggctaaaaac
                                                                     250
tgaataaaag
<210> 229
<211>
      74
<212>
      PRT
<213> Conus radiatus
<400> 229
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Val Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Met Gln Lys His His
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Ala Leu Gly Ser Ile Ser Ser Leu Phe Lys Ser Thr Arg Arg Gly Cys 35 Lys Pro Leu Lys Arg Arg Cys Phe Asn Asp Lys Glu Cys Cys Ser Lys Phe Cys Asn Ser Val Arg Asn Gln Cys Gly 230 <210> <211> 28 <212> PRT <213> Conus radiatus <220> <221> PEPTIDE <222> (1)..(28)Xaa at residue 15 is Glu or gamma-carboxy Glu; Xaa at residue 5 i <223> s Pro or Hyp <400> 230 Arg Gly Cys Lys Xaa Leu Lys Arg Arg Cys Phe Asn Asp Lys Xaa Cys Cys Ser Lys Phe Cys Asn Ser Val Arg Asn Gln Cys <210> 231 <211> 435 <212> DNA <213> Conus radiatus ggaattccgc ttgcacggcg aacctgactt catctttctt ccctgcctcc tttggcatca 60 ccaaaaccat catcaaaatg aaactgacgt gtgtggtgat cgtcgccgtg ctggtcctga 120 cqqcctqtca actcatcaca gctgatgact ccagaggtat gcagaagcat catgccctga 180 qqtcqatcac caaactctcc ctgtcgactc gctgcaaacc tcccggatca ccatgtagag 240 300 tttcttcgta taactgctgc tcttcttgca aatcatacaa caagaaatgt ggctgaactt ccccttctgt gctctatcct tttcctgccc gagtcctcca tacctgagag tagtcatgaa 360 420 ccactgatta cctactcctc tggagggcct cagaggagct actttgaaat aaaagcccgc attgcaaaaa aaaaa 435 <210> 232 <211> 72 <212> PRT <213> Conus radiatus <400> 232 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Val Leu Thr Ala Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Met Gln Lys His His Ala Leu Arg Ser Ile Thr Lys Leu Ser Leu Ser Thr Arg Cys Lys Pro

Pro Gly Ser Pro Cys Arg Val Ser Ser Tyr Asn Cys Cys Ser Ser Cys 50 55 Lys Ser Tyr Asn Lys Lys Cys Gly <210> 233 <211> 27 <212> PRT <213> Conus radiatus <220> <221> PEPTIDE <222> Xaa at residue 3, 4 and 7 is Pro or Hyp; Xaa at residue 13 and 22 <223> is Tyr, 1251=Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or Ophospho-Tyr <400> 233 Cys Lys Xaa Xaa Gly Ser Xaa Cys Arg Val Ser Ser Xaa Asn Cys Cys Ser Ser Cys Lys Ser Xaa Asn Lys Lys Cys Gly <210> 234 392 <211> <212> DNA <213> Conus rattus <400> 234 ggatccatga aactgacgtg catggtgatc atcgccgtgc tgttcctgac agcctgtcaa 60 ttcgatacag ctgcgagcta cgacaaaggt aagcagaaac ctcctactct gaggccagct 120 180 qacaaacaca tcaggttgac caagcgttgc aatgctcgca atgatggttg cagtcaacat tctcaatgct gcagtggatc ttgcaataag actgcaggcg tatgtctgta aagctggtct 240 qccqtctqat attccctttc tqtqctttat cctcttttqc ctgagtcatc catacctgtq 300 360 aatggttaag agccactcaa tacctactcc tctgggggct tcagaggaac tacattaaat 392 aaagccacat tgcaaaaaaa aaaaaaaaaa aa <210> 235 <211> 74 <212> PRT <213> Conus rattus Met Lys Leu Thr Cys Met Val Ile Ile Ala Val Leu Phe Leu Thr Ala Cys Gln Phe Asp Thr Ala Ala Ser Tyr Asp Lys Gly Lys Gln Lys Pro Pro Thr Leu Arg Pro Ala Asp Lys His Ile Arg Leu Thr Lys Arg Cys Asn Ala Arg Asn Asp Gly Cys Ser Gln His Ser Gln Cys Cys Ser Gly

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Ser Cys Asn Lys Thr Ala Gly Val Cys Leu
<210>
       236
<211>
       27
<212>
       PRT
<213>
       Conus rattus
<400> 236
Cys Asn Ala Arg Asn Asp Gly Cys Ser Gln His Ser Gln Cys Cys Ser
Gly Ser Cys Asn Lys Thr Ala Gly Val Cys Leu
<210> -237 ----
<211> 395
<212> DNA
<213> Conus rattus
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ctcgatgcag ctgcgagcta cgacaaaggt aagcagaaac ctcctactct gaggccagct
                                                                      120
gacaaacact tcaggttgat caagcgttgc aatgctcgca atagtggttg cagtcaacat
                                                                      180
cctcaatgct gcagtggatc ttgcaataag actgcaggcg tatgtctgta aagctggtct
                                                                      240
gccgtctgat attccctttc tgtgctttat cctcttttgc ctgagtcatc catacctgtg
                                                                      300
aatggttaag agccactcaa tacctactcc tctgggggct tcagaggaac tacattaaat
                                                                      360
aaagccacat tgcaacgaaa aaaaaaaaaa aaaaa
                                                                      395
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       238
<211>
<212>
       PRT
<213>
      Conus rattus
<400> 238
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Cys Gln Leu Asp Ala Ala Ser Tyr Asp Lys Gly Lys Gln Lys Pro
Pro Thr Leu Arg Pro Ala Asp Lys His Phe Arg Leu Ile Lys Arg Cys
Asn Ala Arg Asn Ser Gly Cys Ser Gln His Pro Gln Cys Cys Ser Gly
Ser Cys Asn Lys Thr Ala Gly Val Cys Leu
<210> 239
<211>
      27
<212>
      PRT
<213>
      Conus rattus
<220>
<221>
      PEPTIDE
<222>
      (1)..(27)
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<223> Xaa at residue 12 is Pro or Hyp
<400> 239
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Gly Ser Cys Asn Lys Thr Ala Gly Val Cys Leu
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<210>
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       390
<212>
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<213>
      Conus rattus
<400> 240
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ttcgatacag ctgcgagcta cgacaaaggt aagcagaaac ctcctactct gaggccagct
                                                                      120
qacaaacact tcaqqttqat caaqcqttqc aatqctcqca ataqtqqttq caqtcaacat
                                                                      180
                                                                      240
cctcaatgct gcagtggatc ttgcaataag actttgggcg tatgtctgta aagctggtct
qccqtctqat attccctttc tqtqctttat cctcttttgc ctgagtcatc catacctgtg
                                                                      300
                                                                      360
aatqqttaaq agccactcaa tacctactcc tctgggggct tcagaggaac tacattaaat
aaagccacat tgaaaaaaaa aaaaaaaaaa
                                                                      390
<210> 241
<211>
      74
<212>
      PRT
<213> Conus rattus
<400> 241
Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Thr Ala
Cys Gln Phe Asp Thr Ala Ala Ser Tyr Asp Lys Gly Lys Gln Lys Pro
Pro Thr Leu Arg Pro Ala Asp Lys His Phe Arg Leu Ile Lys Arg Cys
Asn Ala Arg Asn Ser Gly Cys Ser Gln His Pro Gln Cys Cys Ser Gly
Ser Cys Asn Lys Thr Leu Gly Val Cys Leu
<210>
      242
<211>
      27
<212>
      PRT
<213>
      Conus rattus
<220>
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       PEPTIDE
<222>
       (1)..(27)
<223>
      Xaa at residue 12 is Pro or Hyp
<400> 242
Cys Asn Ala Arg Asn Ser Gly Cys Ser Gln His Xaa Gln Cys Cys Ser
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Gly Ser Cys Asn Lys Thr Leu Gly Val Cys Leu
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       243
<211>
       379
<212>
      DNA
      Conus stercusmuscarum
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                                                                     120
                                                                     180
aggtcgaaga ccaaactctc catgtcgact cgctgcaaga gtaaaggagc aaaatgttca
                                                                     240
aggettatgt atgactgetg cageggittet tycagegget acacaggtag atgtggetga
tocagogoot gatottocco ottotgtgot otatootttt otgootgggt cotoottaco
                                                                     300
tgagagtggt catgaaccac tcatcaccta ctcctctgga ggcctcagag gagttacaat
                                                                     360
                                                                     379
gaaataaaag ccgcattgc
<210>
      244
<211>
       73
<212>
      PRT
<213>
      Conus stercusmuscarum
<400> 244
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Arg Ser Lys Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Ser
Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys Ser Gly Ser
Cys Ser Gly Tyr Thr Gly Arg Cys Gly
<210> 245
<211>
      27
<212>
      PRT
<213>
      Conus stercusmuscarum
<220>
      PEPTIDE
<221>
<222>
      (1)..(27)
      Xaa at residue 13 and 23 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo
       -Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 245
Cys Lys Ser Lys Gly Ala Lys Cys Ser Arg Leu Met Xaa Asp Cys Cys
Ser Gly Ser Cys Ser Gly Xaa Thr Gly Arg Cys
<210>
       246
<211>
      35
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<212> PRT
  <213> Conus stercusmuscarum
  <220>
  <221> PEPTIDE
  <222>
        (1)..(35)
 <223> Xaa at residue 33 is Pro or Hyp; Xaa at residue 10, 21, 24 and 32
          is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O
       ·-phospho-Tyr
 <400> 246
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 Ile Cys Cys Gly Xaa Cys Ala Xaa Phe Gly Lys Lys Cys Ile Asp Xaa
 Xaa Ser Asn
         35
 <210>
        247
 <211>
        380
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        DNA
 <213>
        Conus stercusmuscarum
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                                                                      120
aggtcgaaga ccaaactctc catgttaact ttgcgctgcg catcttacgg aaaaccttgt
                                                                      180
ggtattgaca acgactgctg caatgcatgc gatccagcca gaaatatatg tacgtagctg
                                                                      240
atccggcgtc tgatcttccc ccttctgtgc tctatccttt tctgcctgag tcctccttac
                                                                      300
ctgagagtgg tcatgaacca ctcatcatct actctcctgg aggcctcaga ggagctacaa
                                                                      360
tgaaataaaa gccgcattgc
                                                                      380
<210>
       248
<211>
       72
<212>
      PRT
<213> Conus stercusmuscarum
<400> 248
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Glu His Arg
                                                     30
Ala Leu Arg Ser Lys Thr Lys Leu Ser Met Leu Thr Leu Arg Cys Ala
Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn Ala Cys
Asp Pro Ala Arg Asn Ile Cys Thr
                    70
<210>
      249
<211>
      26
<212>
      PRT
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<213> Conus stercusmuscarum
<220>
<221>
      PEPTIDE
<222>
      (1)..(26)
      Xaa at residue 7 and 20 is Pro or Hyp; Xaa at residue4 is Tyr, 1
       25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
<400> 249
Cys Ala Ser Xaa Gly Lys Xaa Cys Gly Ile Asp Asn Asp Cys Cys Asn
Ala Cys Asp Xaa Ala Arg Asn Ile Cys Thr
<210>
       250
<211>
       388
<212>
      DNA
<213>
      Conus stercusmuscarum
<400> 250
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                                                                      120
aaactctcca tgttaacttt gcgctgcgta tcttacggaa aaccttgtgg tattgacaac
                                                                      180
qactqctqca atqcatqcqa tccaqccaga aatatatqta cgtaqctqat ccgqcqtctq
                                                                      240
atcttccccc ttctgtgctc tatccttttc tgcctgggtc ctccttacct gagagtggtc
                                                                      300
atgaaccact catcacctac tectetggag geeteagagg agttacaatg aaataaaage
                                                                      360
                                                                      388
cgcattgcaa aaaaaaaaa aaaaaaaa
<210>
       251
<211>
       72
<212>
      PRT
<213>
      Conus stercusmuscarum
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Glu His Arg
Ala Leu Arg Ser Lys Thr Lys Leu Ser Met Leu Thr Leu Arg Cys Val
Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn Ala Cys
                                             60
Asp Pro Ala Arg Asn Ile Cys Thr
<210>
       252
<211>
       26
<212>
      PRT
<213>
       Conus stercusmuscarum
<220>
<221>
      PEPTIDE
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<222>
      (1)..(26)
<223> Xaa at residue 7 and 20 is Pro or Hyp; Xaa at residue 4 is Tyr, 1
       25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
<400> 252
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Ala Cys Asp Xaa Ala Arg Asn Ile Cys Thr
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      Conus striatus-
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                                                                      120
aggtcgacca ccaaagtctc caaggcgact gactgcattg aagccggaaa ttattgcgga
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cctactgtta tgaaaatctg ctgcggcttt tgcagtccat acagcaaaat atgtatgaac
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      PRT
<213>
       Conus striatus
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
Ser Leu Arg Ser Thr Thr Lys Val Ser Lys Ala Thr Asp Cys Ile Glu
Ala Gly Asn Tyr Cys Gly Pro Thr Val Met Lys Ile Cys Cys Gly Phe
Cys Ser Pro Tyr Ser Lys Ile Cys Met Asn Tyr Pro Lys Asn
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       Conus striatus
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       (1)..(36)
       Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13,
<223>
       25 and 34 is Pro or Hyp; Xaa at residue 10, 26 and 33 is Tyr, 125
       I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 255
Ala Thr Asp Cys Ile Xaa Ala Gly Asn Xaa Cys Gly Xaa Thr Val Met
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Xaa Xaa Lys Asn
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tgctctatcc ttttctgcct gggtcctcct tacctgagag tggtcatgaa ccactcatca
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cctactcctc tggaggcctc agaggagcta caatgaaata aaagccgcat tgc
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       PRT
      Conus striatus
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Asp Cys Cys Ser Gly Ser Cys Gly Arg Arg Gly Lys Cys Gly
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<211>
       26
<212> PRT
<213> Conus striatus
<220>
<221>
       PEPTIDE
<222>
       (1)...(26)
       Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
<223>
       -sulpho-Tyr or O-phospho-Tyr
<400> 258
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Ser Gly Ser Cys Gly Arg Arg Gly Lys Cys
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       DNA
       Conus striatus
<213>
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                                                                      120
aggtcggaca ccaaactctc catgtcgact cgctgcaagg ctgcaggaaa atcatgcagt
                                                                      180
aggattgcgt ataactgctg caccggttct tgcagatcag gtaaatgcgg ctgatccagc
                                                                      240
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       PRT
<213>
      Conus striatus
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Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
                                                     30
Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Ala
Ala Gly Lys Ser Cys Ser Arg Ile Ala Tyr Asn Cys Cys Thr Gly Ser
Cys Arg Ser Gly Lys Cys Gly
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       PRT
<213>
      Conus striatus
<220>
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       PEPTIDE
<222>
       (1)..(25)
       Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulpho-Tyr or O-phospho-Tyr
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Thr Gly Ser Cys Arg Ser Gly Lys Cys
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       256
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       DNA
<213>
       Conus striatus
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                                                                       120
aggtcggaca ccaaactete catgttaact ttgcgctgcg aatettacgg aaaacettgt
                                                                      180
                                                                       240
ggtatttaca acgactgctg caatgcatgc gatccagcca aaaagacatg tacgtagctg
                                                                       256
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<210>
       263
<211>
       72
<212>
      PRT
<213> Conus striatus
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Glu His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Leu Thr Leu Arg Cys Glu
Ser Tyr Gly Lys Pro Cys Gly Ile Tyr Asn Asp Cys Cys Asn Ala Cys
Asp Pro Ala Lys Lys Thr Cys Thr
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<211>
      26
<212> PRT
<213> Conus striatus
<220>
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      PEPTIDE
<222>
      (1)..(26)
      Xaa at residue 2 is Glu or gamma-carboxy Glu; Xaa at residue 7 an
      d 20 is Pro or Hyp; Xaa at residue 4 and 11 is Tyr, 125I-Tyr, mon
       o-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Ala Cys Asp Xaa Ala Lys Lys Thr Cys Thr
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                                                                      120
                                                                     180
tgcctqagtc ctccttacct gagagtggtc gtgaaccact catcgcctac tcctctggag
gcttcagagg ggctacacta aaataaaagc tatattgcaa tgaaaaaaa
                                                                     229
<210>
       266
<211>
      24
      PRT
<212>
<213> Conus striatus
<400> 266
Cys Arg Ser Ser Gly Ser Pro Cys Gly Val Thr Ser Ile Cys Cys Gly
Arg Cys Tyr Arg Gly Lys Cys Thr
<210>
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<211>
      24
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<212>

PRT

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<213> Conus striatus
       <220>
       <221> PEPTIDE
       <222>
             (1)..(24)
             Xaa at residue 7 is Pro or Hyp; Xaa at residue 19 is Tyr, 125I-Ty
             r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
      <400> 267
      Cys Arg Ser Ser Gly Ser Xaa Cys Gly Val Thr Ser Ile Cys Cys Gly
                                           10
      Arg Cys Xaa Arg Gly Lys Cys Thr
                  20
----<210>- 268 ----
      <211> 26
      <212> PRT
      <213> Conus striatus
      <220>
      <221>
             PEPTIDE
      <222>
             (1)..(26)
             Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
      <223>
             -sulpho-Tyr or O-phospho-Tyr
      <400> 268
      Cys Lys Leu Lys Gly Gln Ser Cys Arg Lys Thr Ser Xaa Asp Cys Cys
      Ser Gly Ser Cys Gly Arg Ser Gly Lys Cys
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             269
      <211>
             292
      <212>
             DNA
      <213>
            Conus striolatus
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                                                                            120
     aggtcgacta ctaaagtctc catgtcgact cgctgcaagg gtaaaggagc atcatgtctt
                                                                            180
     aggactgcgt atgactgctg caccggttct tgcaacagag gtagatgtgg ctgatccagc
                                                                            240
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                                                                            292
     <210>
            270
     <211>
            71
     <212>
            PRT
     <213>
            Conus striolatus
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     Cys Arg Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His Arg
     Ser Leu Arg Ser Thr Thr Lys Val Ser Met Ser Thr Arg Cys Lys Gly
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 <212>
       PRT
 <213> Conus striolatus
 <220>
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       PEPTIDE
 <222>
        (1)..(25)
        Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulphe-Tyr-or-O-phospho-Tyr-
 <400> 271
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 Thr Gly Ser Cys Asn Arg Gly Arg Cys
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        259
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       DNA
 <213>
        Conus striolatus
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                                                                       120
togacogtca gacgotocaa gtocgagttg actacgagat gcaggootto aggatocaac
                                                                       180
tgtggtaata ttagtatctg ctgtggtaga tgcgttaaca gaagatgtac gtagctcatc
                                                                       240
gggcgtctga tctttcccc
                                                                       259
<210>
       273
<211>
       71
<212>
       PRT
<213>
      Conus striolatus
<400> 273
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Gln Leu Ile Thr Ala Glu Asp Ser Arg Gly Thr Gln Lys His Arg Thr
                                 25
Leu Arg Ser Thr Val Arg Arg Ser Lys Ser Glu Leu Thr Thr Arg Cys
Arg Pro Ser Gly Ser Asn Cys Gly Asn Ile Ser Ile Cys Cys Gly Arg
Cys Val Asn Arg Arg Cys Thr
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<211>
       24
<212>
      PRT
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        PEPTIDE
 <222>
        (1)..(24)
        Xaa at residue 3 is Pro or Hyp
 <223>
 <400> 274
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 Arg Cys Val Asn Arg Arg Cys Thr
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_<211> 280_
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       DNA
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       Conus striolatus
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                                                                       120
aggtcgacta ccaaagtctc caagtcgact agctgcatga aagccgggtc ttattgcgtc
                                                                       180
gctactacga gaatctgctg cggttattgc gcttatttcg gcaaaatatg tattgactat
                                                                      240
cccaaaaact gatcttcccc ctactgtgct ctatcctttt
                                                                      280
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       77
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       PRT
<213>
       Conus striolatus
<400> 276
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala
Cys Gln Leu Ile Thr Ala Glu Asp Ser Arg Gly Thr Gln Lys His Arg
Ser Leu Arg Ser Thr Thr Lys Val Ser Lys Ser Thr Ser Cys Met Lys
Ala Gly Ser Tyr Cys Val Ala Thr Thr Arg Ile Cys Cys Gly Tyr Cys
Ala Tyr Phe Gly Lys Ile Cys Ile Asp Tyr Pro Lys Asn
<210>
      277
<211>
      35
<212>
      PRT
<213>
      Conus striolatus
<220>
<221>
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<222>
       (1)..(35)
      Xaa at residue 33 is Pro or Hyp; Xaa at residue 10, 21, 24 and 32
<223>
       is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-
      phospho-Tyr
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Ile Cys Cys Gly Xaa Cys Ala Xaa Phe Gly Lys Ile Cys Ile Asp Xaa
Xaa Lys Asn
        35
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      Conus textile
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                                                                      174
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       279
<211>
       31
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       PRT
<213>
      Conus textile
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Leu Thr Arg Tyr Cys Thr Pro His Gly Gly His Cys Gly Tyr His Asn
Asp Cys Cys Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Glu
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<210>
       280
<211>
      28
<212> PRT
<213> Conus textile
<220>
<221>
      PEPTIDE
<222>
       (1)..(28)
      Xaa at residue 28 is Glu or gamma-carboxy Glu; Xaa at residue 4 i
<223>
       s Pro or Hyp; Xaa at residue 1 and 11 is Tyr, 125I-Tyr, mono-iodo
       -Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Xaa
<210>
       281
<211>
       28
<212>
       PRT
<213>
      Conus textile
<220>
<221>
       PEPTIDE
<222>
       (1)..(28)
      Xaa at residue 28 is Glu or gamma-carboxy Glu; Xaa at residue 4 i
       s Pro or Hyp; Xaa at residue 1 and 11 is Tyr, 125I-Tyr, mono-iodo
       -Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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 Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Xaa
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        282
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 <213>
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                                                                       120
 gggcggacca ccaaactcac cttgtcgact cgctgcaaat cacccggatc tccatgttca
                                                                       180
 ccgactagtt ataattgctg ctggtcttgc agtccataca gaaaaaaatg taggggctaa
                                                                       240
 tccagcgcct gattttcccc cttctgtgct ctattccttt ctgcctgagt cctccttacc
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        73
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        PRT
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Cys Gln Leu Ile Thr Ala Leu His Ser Arg Gly Thr Gln Lys His Arg
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Ala Leu Gly Arg Thr Thr Lys Leu Thr Leu Ser Thr Arg Cys Lys Ser
                             40
Pro Gly Ser Pro Cys Ser Pro Thr Ser Tyr Asn Cys Cys Trp Ser Cys
Ser Pro Tyr Arg Lys Lys Cys Arg Gly
<210>
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       27
<212>
       PRT
<213>
       Conus tulipa
<220>
<221>
       PEPTIDE
<222>
       (1)..(27)
       Xaa at residue 3, 7, 10 and 21 is Pro or Hyp; Xaa at residue 17 i
       s Trp or Bromo Trp; Xaa at residue 13 and 22 is Tyr, 125I-Tyr, mo
       no-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 284
Cys Lys Ser Xaa Gly Ser Xaa Cys Ser Xaa Thr Ser Xaa Asn Cys Cys
                                    10
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<211>
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       DNA
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       Conus tulipa
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                                                                      120
qqqtcqacca ccaaactcac cttgtcgact cgctgcttgt cacccggatc ttcatgttca
                                                                      180
                                                                      240^{-}
cogactagtt ataattgotg caggtottge aatocataca gcagaaaatg taggggotaa
tocagogoot gatottocoo ottotgtgot otattocttt otgootgagt cotoottaco
                                                                      300
                                                                      360
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gaaataaaag ccgcattgc
                                                                       379
       286
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<211>
       73
       PRT
<212>
<213>
       Conus tulipa
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Cys Gln Leu Ile Thr Ala Leu His Ser Arg Gly Thr Gln Lys His Arg
Ala Leu Gly Ser Thr Thr Lys Leu Thr Leu Ser Thr Arg Cys Leu Ser
Pro Gly Ser Ser Cys Ser Pro Thr Ser Tyr Asn Cys Cys Arg Ser Cys
    50
Asn Pro Tyr Ser Arg Lys Cys Arg Gly
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       287
<211>
       27
<212>
      PRT
<213>
      Conus tulipa
<220>
<221>
       PEPTIDE
<222>
       (1)..(27)
       Xaa at residue 4, 10 and 21 is Pro or Hyp; Xaa at residue 13 and
       22 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or
       O-phospho-Tyr
<400> 287
Cys Leu Ser Xaa Gly Ser Ser Cys Ser Xaa Thr Ser Xaa Asn Cys Cys
Arg Ser Cys Asn Xaa Xaa Ser Arg Lys Cys Arg
                                 25
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<210> 288

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       Conus viola
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                                                                      120
aggaaggcca ccaaactccc cgtgtcgact cgctgcatta ctttaggaac acgatgtaag
                                                                      180
gttccgagtc aatgctgcag atcttcttgc aagaacggtc gttgtgctcc atcccctgaa
                                                                      240
gaatggtaaa tgtggctgat ccagcgcctg atcttccccc ttctgactgt ctccgacctt
                                                                      300
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                                                                      401
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       76
<212>
       PRT
<213>
       Conus viola
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Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Leu His Arg
Ala Leu Arg Lys Ala Thr Lys Leu Pro Val Ser Thr Arg Cys Ile Thr
Leu Gly Thr Arg Cys Lys Val Pro Ser Gln Cys Cys Arg Ser Ser Cys
    50
Lys Asn Gly Arg Cys Ala Pro Ser Pro Glu Glu Trp
<210>
       290
<211>
       31
<212>
      PRT
<213> Conus viola
<220>
<221>
       PEPTIDE
<222>
      (1)..(31)
      Xaa at residue 29 and 30 is Glu or gamma-carboxy Glu; Xaa at resi
       due 11, 26 and 28 is Pro or Hyp; Xaa at residue 31 is Trp or Brom
       o Trp
Cys Ile Thr Leu Gly Thr Arg Cys Lys Val Xaa Ser Gln Cys Cys Arg
Ser Ser Cys Lys Asn Gly Arg Cys Ala Xaa Ser Xaa Xaa Xaa
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       291
<211>
       372
<212>
      DNA
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                                                                      120
aggaaggcca ccaaactete cgtgtcgact cgctgcaaga gtagaggate atcatgtcgt
                                                                      180
aggacttcgt atgactgctg cacgggttct tgcagaaatg gtaaatgtgg ctgatccagc
                                                                      240
gcctgatctt cccccttctg tgctccatcc ttttctgcct gagtcctcct tacctgagag
                                                                      300
tgggcatgaa ccactcatca cctactccct ggaagcttca gaggagctac attgaaataa
                                                                      360
aagccgcatt gc
                                                                      372
<210> 292
<211>
       71
<212>
       PRT
<213> Conus viola
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Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Ile Ala Gly Asp Ser Arg Gly Thr Gln Leu His Arg
Ala Leu Arg Lys Ala Thr Lys Leu Ser Val Ser Thr Arg Cys Lys Ser
Arg Gly Ser Ser Cys Arg Arg Thr Ser Tyr Asp Cys Cys Thr Gly Ser
                                             60
Cys Arg Asn Gly Lys Cys Gly
<210>
       293
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       25
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      PRT
<213>
      Conus viola
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<222>
       (1)..(25)
       Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulpho-Tyr or O-phospho-Tyr
<400> 293
Cys Lys Ser Arg Gly Ser Ser Cys Arg Arg Thr Ser Xaa Asp Cys Cys
Thr Gly Ser Cys Arg Asn Gly Lys Cys
<210>
       294
<211>
       380
<212>
      DNA
<213>
       Conus viola
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                                                                       240
 aatcccaaca attgatcttc ccccttgtgt gctccatctt ttctgcctga gtcctcctta
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                                                                       360
 ttgaaataaa agccgcatgc
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       Conus viola
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Met Lys Leu Thr Cys Val Ala Ile Val Ala Val Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Glu Asp Ser Arg Gly Thr His Glu His Leu
                                                     30
Ala Leu Lys Ser Thr Ser Lys Val Ser Lys Ser Thr Ser Cys Met Glu
Ala Arg Ser Tyr Cys Gly Pro Ala Thr Thr Lys Ile Cys Cys Asp Phe
Cys Ser Pro Phe Ser Asp Arg Cys Met Asn Asn Pro Asn Asn
                    70
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       36
<212>
       PRT
<213> Conus viola
<220>
<221>
       PEPTIDE
<222>
       (1)...(36)
       Xaa at residue6 is Glu or gamma-carboxy Glu; Xaa at residue 13,
<223>
       25 and 34 is Pro or Hyp; Xaa at residue 10 is Tyr, 125I-Tyr, mono
       -iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 296
Ser Thr Ser Cys Met Xaa Ala Arg Ser Xaa Cys Gly Xaa Ala Thr Thr
Lys Ile Cys Cys Asp Phe Cys Ser Xaa Phe Ser Asp Arg Cys Met Asn
Asn Xaa Asn Asn
        35
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       373
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       DNA
<213>
      Conus viola
<400> 297
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acggcctgtc agctcattac agctgaggac tccagaggta cgcagttgca tcgtgccctg
                                                                      120
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aggaagacca ccaaactctc cttgtcgact cgctgcaagg gtccaggagc catatgtata

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aggattgcgt ataactgctg caagtattct tgcggaaatg gtaaatgtgg ctgatccagc
                                                                       240
gcctgatctt cccccttgtg tgctccatcc tttttctgcc tgagtcctcc ttacctgaga
                                                                       300
gtggtcatga accactcatc acctactcct ctggaggctt cagaggagct acattgaaat
                                                                       360
aaaagccgca tgc
                                                                       373
<210>
       298
<211>
       71
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       PRT
<213>
       Conus viola
<400> 298
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala

1 10 15
Cys Gln Leu Ile Thr Ala Glu Asp Ser Arg Gly Thr Gln Leu His Arg
Ala Leu Arg Lys Thr Thr Lys Leu Ser Leu Ser Thr Arg Cys Lys Gly
Pro Gly Ala Ile Cys Ile Arg Ile Ala Tyr Asn Cys Cys Lys Tyr Ser
Cys Gly Asn Gly Lys Cys Gly
<210>
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       25
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       PRT
<213> Conus viola
<220>
<221>
       PEPTIDE
<222>
      (1)..(25)
       Xaa at residue 3 is Pro or Hyp; Xaa at residue 13 and 18 is Tyr,
       125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
       yr
<400> 299
Cys Lys Gly Xaa Gly Ala Ile Cys Ile Arg Ile Ala Xaa Asn Cys Cys
Lys Xaa Ser Cys Gly Asn Gly Lys Cys
<210>
       300
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       353
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       DNA
<213>
      Conus viola
<400>
       300
accaaaacca tcatcaaaat gaaactgacg tgtgtggtga tcgtcgccgt gctgttcctg
                                                                        60
acggcctgtc aattcatcac agctgatgac tccagaagta cgcagaagca tcgtgccctg
                                                                       120
aggtcgacca ccaaacactt tatgttgact tggtactgca cgccttatgg aggacattgt
                                                                       180
ggttattata atgactgctg cagtcatcaa tgcaatataa acagaaataa atgtgagtag
                                                                       240
ctgatccggc atctgatctg tgctcgccct aacctgagag tggtcatgaa ccactcatca
                                                                       300
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353 tctactcctc tggaggcttc agaggagcta catggaaata aaagccgcat tgc <210> 301 <211> 73 <212> PRT <213> Conus viola <400> 301 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala Cys Gln Phe Ile Thr Ala Asp Asp Ser Arg Ser Thr Gln Lys His Arg Ala Leu Arg Ser Thr Thr Lys His Phe Met Leu Thr Trp Tyr Cys Thr Pro Tyr Gly Gly His Cys Gly Tyr Tyr Asn Asp Cys Cys Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Glu <210> 302 <211> 28 <212> PRT <213> Conus viola <220> <221> PEPTIDE <222> (1)..(28)Xaa at residue 28 is Glu or gamma-carboxy Glu; Xaa at residue 4 i <223> s Pro or Hyp; Xaa at residue 1, 5, 11 and 12 is Tyr, 125I-Tyr, mo no-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr <400> 302 Xaa Cys Thr Xaa Xaa Gly Gly His Cys Gly Xaa Xaa Asn Asp Cys Cys Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Xaa <210> 303 <211> 294 <212> DNA <213> Conus pulicarius <400> 303 ggatccatga aactgacgtg cgtggtgatt atcgccgtgc tgttcctgac ggcctgtcaa 60 ctcattacag ctgagactta ctccagaggt aagcagatgc accgtgctct gaggtcaact 120 gacaaaaact ccaagttgac cagggaatgc acacctccag atggagcttg tggtttacct 180 acacactgct gcgggttttg cgatatggca aacaacagat gtctgtaaag cgtctgatat 240 294 teceettetg tgetetatee tetttggeet gagteateea taeetgtget egag <210> 304 <211> 73 PRT <212> <213> Conus pulicarius <400> 304

Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Thr Ala Cys Gln Leu Ile Thr Ala Glu Thr Tyr Ser Arg Gly Lys Gln Met His Arg Ala Leu Arg Ser Thr Asp Lys Asn Ser Lys Leu Thr Arg Glu Cys Thr Pro Pro Asp Gly Ala Cys Gly Leu Pro Thr His Cys Cys Gly Phe Cys Asp Met Ala Asn Asn Arg Cys Leu <210> 7305 <211> 27 <212> PRT <213> Conus pulicarius <220> <221> PEPTIDE <222> (1)..(27)Xaa at residue 1 is Glu or gamma-carboxy Glu; Xaa at residue 4, 5 and 12 is Pro or Hyp <400> 305 Xaa Cys Thr Xaa Xaa Asp Gly Ala Cys Gly Leu Xaa Thr His Cys Cys Gly Phe Cys Asp Met Ala Asn Asn Arg Cys Leu <210> 306 <211> 294 <212> DNA <213> Conus pulicarius <400> 306 ggatccatga aactgacgtg cgtggtgatt atcgccgtgc tgttcctgac ggcctgtcaa 60 ctcattacag ctgagactta ctccagaggt aagcagatgc accgtgctct gaggtcaact 120 gacaaaaact cccagttgac cagggaatgc acacctccag gtggagcttg tggtttacct 180 acacactgct gcgggttttg cgatatggca aacaacagat gtctgtaaag cgtctgatat 240 294 teceettetg tgetetatee tetttggeet gagteateea taeetgtget egag <210> 307 <211> 73 <212> PRT <213> Conus pulicarius <400> 307 Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Thr Ala Cys Gln Leu Ile Thr Ala Glu Thr Tyr Ser Arg Gly Lys Gln Met His 30 Arg Ala Leu Arg Ser Thr Asp Lys Asn Ser Gln Leu Thr Arg Glu Cys

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Thr Pro Pro Gly Gly Ala Cys Gly Leu Pro Thr His Cys Cys Gly Phe
                         55
Cys Asp Met Ala Asn Asn Arg Cys Leu
<210>
       308
<211>
       27
<212>
      PRT
<213> Conus pulicarius
<220>
<221>
       PEPTIDE
<222>
       (1)..(27)
       Xaa at residue 1 is Glu or gamma-carboxy Glu; Xaa at residue 4, 5
       and 12 is Pro or Hyp
<400> 308
Xaa Cys Thr Xaa Xaa Gly Gly Ala Cys Gly Leu Xaa Thr His Cys Cys
Gly Phe Cys Asp Met Ala Asn Asn Arg Cys Leu
<210>
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       307
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      Conus rattus
<213>
<400> 309
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cctqttacaa ctgagacttt ctccagaggt aaggagaagc gtcgtgctct gaggtcaact
                                                                      120
gacggcaact cccggttgac cagggcatgc acgcctgaag gtggagcctg tagtagtggg
                                                                      180
cgtcactgct gcggcttttg cgataacgtg tcccacacgt gctatggtga aacaccatct
                                                                      240
ctccactgat gtttcccctt ctgtgctcta tcttcttttg cctgagtcat ccatacctgt
                                                                      300
gctcgag
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       80
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<213> Conus rattus
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Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Ala Ala
Cys Gln Pro Val Thr Thr Glu Thr Phe Ser Arg Gly Lys Glu Lys Arg
Arg Ala Leu Arg Ser Thr Asp Gly Asn Ser Arg Leu Thr Arg Ala Cys
Thr Pro Glu Gly Gly Ala Cys Ser Ser Gly Arg His Cys Cys Gly Phe
Cys Asp Asn Val Ser His Thr Cys Tyr Gly Glu Thr Pro Ser Leu His
<210> 311
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<211>
      34
<212>
      PRT
<213>
      Conus rattus
<220>
       PEPTIDE
<221>
<222>
       (1)..(34)
       Xaa at residue 5 and 29 is Glu or gamma-carboxy Glu; Xaa at resid
       ue 4 and 31 is Pro or Hyp; Xaa at residue 27 is Tyr, 125I-Tyr, mo
       no-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
Ala Cys Thr Xaa Xaa Gly Gly Ala Cys Ser Ser Gly Arg His Cys Cys
Gly Phe Cys Asp Asn Val Ser His Thr Cys Xaa Gly Xaa Thr Xaa Ser
Leu His
       312
<210>
       342
<211>
<212>
       DNA
       Conus stercusmuscarum
<220>
      misc_feature
<221>
<222>
       (1)..(342)
       n may be any nucleotide
<223>
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ctcatcacag ctgatgactc cagaggtacg caggagcatc gtgccctgag gtcggacacc
                                                                       120
aaactcccca tatcgactcg ctgcaagggt aaaggagcat catgtcataa gactatgtat
                                                                       180
gactgctgca gcggttcctg caccagaggt agatgtggct gatccagcgc ctgatcttcc
                                                                       240
cccttctgtg ctctatcctt ttctgcctga gtcatcatac ctgtgctcga gcgttactag
                                                                       300
                                                                       342
tggatccgag ctcggtacca agcttggcgt aatcataaaa nc
<210>
       313
<211>
       71
<212>
       PRT
       Conus stercusmuscarum
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Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Glu His Arg
Ala Leu Arg Ser Asp Thr Lys Leu Pro Ile Ser Thr Arg Cys Lys Gly
Lys Gly Ala Ser Cys His Lys Thr Met Tyr Asp Cys Cys Ser Gly Ser
Cys Thr Arg Gly Arg Cys Gly 65 70
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 <211> 25
 <212> PRT
 <213> Conus stercusmuscarum
 <220>
      PEPTIDE
<221>
 <222>
       (1)..(25)
 <223> Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
       -sulpho-Tyr or O-phospho-Tyr
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Cys Lys Gly Lys Gly Ala Ser Cys His Lys Thr Met Xaa Asp Cys Cys
Ser Gly Ser Cys Thr Arg Gly Arg Cys
            20
<210>
<211> 33
<212> PRT
<213> Conus arenatus
<400> 315
Gln Cys Ser Ala Asn Gly Gly Ser Cys Thr Arg His Phe His Cys Cys
Ser Leu Tyr Cys Asn Lys Asp Ser Ser Val Cys Val Ala Thr Ser Tyr
Pro
<210> 316
<211> 28
<212> PRT
<213> Conus arenatus
<400> 316
Thr Cys Asn Thr Pro Thr Glu Tyr Cys Thr Leu His Arg His Cys Cys
Ser Gly Tyr Cys His Lys Thr Ile Gln Ala Cys Ser
<210>
       317
<211>
       33
<212> PRT
<213> Conus arenatus
<400> 317
Gln Cys Thr Pro Asn Gly Gly Ser Cys Ser Arg His Phe His Cys Cys
Ser Leu Tyr Cys Asn Lys Ser Thr Gly Val Cys Ile Ala Thr Ser Tyr
Pro
<210>
      318
<211>
       33
<212>
      PRT
<213> Conus arenatus
<400> 318
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Gln Cys Thr Pro Asn Gly Gly Ser Cys Ser Arg His Phe His Cys Cys
Ser Leu Tyr Cys Asn Lys Ser Thr Gly Val Cys Ile Ala Thr Ser Tyr
Pro
<210>
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<211> 27
<212> PRT
<213> Conus arenatus
<400> 319
Glu Cys Thr Pro Pro Gly Gly Ala Cys Gly Leu Pro Thr His Cys Cys
                               - 1-0
Gly Phe Cys Asp Thr Ala Asn Asn Arg Cys Leu
<210>
      320
<211>
      28
      PRT
<212>
<213> Conus arenatus
<400> 320
Thr Cys Asn Thr Pro Thr Glu Tyr Cys Thr Leu His Gln His Cys Cys
Ser Gly His Cys His Lys Thr Ile Gln Ala Cys Ala
<210>
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<211> 30
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<213> Conus arenatus
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Gln Cys Ser Pro Ile Gly Gly Tyr Cys Thr Leu His Ile His Cys Cys
Ser Asn His Cys Ile Lys Pro Ile Gly Arg Cys Val Ala Thr
<210> 322
<211>
      30
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<213> Conus arenatus
<400> 322
Gln Cys Leu Pro Asn Gly Gly Tyr Cys Thr Leu His Ile His Cys Cys
Ser Asp His Cys Ile Lys Pro Ile Asp Arg Cys Val Ala Thr
<210>
      323
<211>
      25
<212>
      PRT
<213>
      Conus aurisiacus
<400> 323
Cys Lys Gly Lys Gly Lys Pro Cys Ser Arg Ile Ser Tyr Asn Cys Cys
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Thr Gly Ser Cys Arg Ser Gly Lys Cys
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<210>
      324
<211>
      32
<212>
      PRT
<213> Conus aurisiacus
<400> 324
Cys Met Glu Ala Gly Ser Tyr Cys Gly Ser Thr Thr Arg Ile Cys Cys
Gly Phe Cys Ala Tyr Phe Gly Lys Lys Cys Ile Asp Tyr Pro Ser Asn
<210>
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<211> 25
<212> PRT
<213> Conus aurisiacus
<400> 325
Cys Lys Ala Lys Gly Lys Pro Cys Ser Arg Ile Ala Tyr Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 326
<211> 26
<212> PRT
<213> Conus aurisiacus
<400> 326
Cys Ala Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn
Ala Cys Asp Pro Gly Arg Asn Ile Cys Thr
<210>
      327
<211>
      36
<212> PRT
<213> Conus bullatus
<400> 327
Ser Thr Ser Cys Met Glu Ala Gly Ser Tyr Cys Gly Pro Ala Thr Thr
Lys Ile Cys Cys Asp Phe Cys Ser Pro Phe Ser Asp Arg Cys Met Asn
Asn Pro Asn Asn
        35
<210>
      328
<211>
      31
<212>
      PRT
<213> Conus bullatus
<400> 328
Cys Ile Thr Pro Gly Thr Arg Cys Lys Val Pro Ser Gln Cys Cys Arg
Gly Pro Cys Lys Asn Gly Arg Cys Thr Pro Ser Pro Ser Glu Trp
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<210> 329
<211> 26
<212> PRT
<213> Conus bullatus
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Thr Cys Asp Pro Ala Arg Arg Thr Cys Thr
<210>
      330
           <211>
      25
<212> PRT
<213> Conus bullatus
<400> 330
Cys Lys Gly Pro Gly Ala Ser Cys Ile Arg Ile Ala Tyr Asn Cys Cys
Lys Tyr Ser Cys Arg Asn Gly Lys Cys
<210> 331
<211> 36
<212> PRT
<213> Conus bullatus
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Ser Thr Ser Cys Met Ala Ala Gly Ser Tyr Cys Gly Pro Ala Thr Thr
Asn Ile Cys Cys Asp Phe Cys Ser Pro Phe Ser Asp Arg Cys Met Lys
Lys Pro Asn Asn
       35
<210> 332
<211> 25
<212> PRT
<213> Conus bullatus
<400> 332
Cys Lys Ser Lys Gly Ser Ser Cys His Arg Thr Ser Tyr Asp Cys Cys
Thr Gly Ser Cys Arg Asn Gly Arg Cys
<210>
      333
<211>
      25
<212>
      PRT
<213> Conus catus
<400> 333
Cys Lys Ser Thr Gly Ala Ser Cys Arg Arg Thr Ser Tyr Asp Cys Cys
Thr Gly Ser Cys Arg Ser Gly Arg Cys
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<210> 334
<211> 25
<212> PRT
<213> Conus catus
<400> 334
Cys Gln Gly Arg Gly Ala Ser Cys Arg Lys Thr Met Tyr Asn Cys Cys
Ser Gly Ser Cys Asn Arg Gly Ser Cys
<210> 335
<211> 28
<21,2>_ PRT_
<213> Conus catus
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Gly Thr Cys Ser Ser Val Leu Lys Ser Cys Val Ser
<210>
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<211>
      25
<212> PRT
<213> Conus catus
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Cys Gln Gly Arg Gly Gly Pro Cys Thr Lys Ala Val Phe Asn Cys Cys
Ser Gly Ser Cys Asn Arg Gly Arg Cys
<210> 337
<211> 26
<212> PRT
<213> Conus catus
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Cys Ala Thr Tyr Gly Lys Pro Cys Gly Ile Gln Asn Asp Cys Cys Asn
Thr Cys Asp Pro Ala Arg Lys Thr Cys Thr
<210> 338
<211> 25
<212> PRT
<213> Conus catus
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Cys Arg Gly Arg Gly Gly Pro Cys Thr Lys Ala Met Phe Asn Cys Cys
Ser Gly Ser Cys Asn Arg Gly Arg Cys
<210> 339
<211>
       33
<211> 33
<212> PRT
<213> Conus caracteristicus
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<400> 339
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Ser Leu Tyr Cys Asn Lys Asp Ser Ser Val Cys Val Ala Thr Ser Tyr
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<211>
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<213> Conus consors
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Cys Ala Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn
Thr Cys Asp Pro Ala Arg Lys Thr Cys Thr
<210> 341
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<211>
<212>
      PRT
<213> Conus consors
<400> 341
Cys Lys Gly Thr Gly Lys Pro Cys Ser Arg Ile Ala Tyr Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 342
<211> 36
<212> PRT
<213> Conus consors
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Ala Thr Asp Cys Ile Glu Ala Gly Asn Tyr Cys Gly Pro Thr Val Met
Lys Ile Cys Cys Gly Phe Cys Ser Pro Tyr Ser Lys Ile Cys Met Asn
Tyr Pro Gln Asn
        35
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Cys Lys Gly Lys Gly Ala Ser Cys Thr Arg Leu Met Tyr Asp Cys Cys
His Gly Ser Cys Ser Ser Ser Lys Gly Arg Cys
<210>
      344
<211>
      25
<212> PRT
<213> Conus consors
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Cys Lys Gly Lys Gly Ala Ser Cys His Arg Thr Ser Tyr Asp Cys Cys
Thr Gly Ser Cys Asn Arg Gly Lys Cys
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       345
<211>
       26
<212> PRT
<213> Conus consors
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Cys Ala Ser Tyr Gly Lys Pro Cys Gly Ile Tyr Asn Asp Cys Cys Asn
Thr Cys Asp Pro Ala Arg Lys Thr Cys Thr
<210> 346
<211> 25
<212> PRT
<213> Conus consors
<400> 346
Cys Lys Gly Thr Gly Lys Pro Cys Ser Arg Val Ala Tyr Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 347
<211> 35
<212> PRT
<213> Conus consors
<400> 347
Ser Thr Ser Cys Met Lys Ala Gly Ser Tyr Cys Arg Ser Thr Thr Arg
Thr Cys Cys Gly Tyr Cys Ala Tyr Phe Gly Lys Phe Cys Ile Asp Phe
Pro Ser Asn
<210> 348
<211> 25
<212> PRT
<213> Conus circumcisus
<400> 348
Cys Lys Gly Lys Gly Ala Ser Cys Arg Lys Thr Met Tyr Asn Cys Cys
Ser Gly Ser Cys Ser Asn Gly Arg Cys
<210>
       349
<211> 35
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<213> Conus circumcisus
<400> 349
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Ser Thr Ser Cys Met Glu Ala Gly Ser Tyr Cys Arg Ser Thr Thr Arg
Thr Cys Cys Gly Tyr Cys Ser Tyr Phe Ser Lys Lys Cys Ile Asp Phe
                                25
Pro Ser Asn
        35
       350
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       PRT
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Cys Lys Ser Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
                                    10
Ser Gly Ser Cys Ser Arg Tyr Ser Gly Arg Cys
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       351
<211>
       35
<212>
      PRT
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<400> 351
Ser Thr Gly Cys Met Lys Ala Gly Ser Tyr Cys Arg Ser Thr Thr Arg
Thr Cys Cys Gly Tyr Cys Ala Tyr Phe Gly Lys Lys Cys Ile Asp Tyr
                                25
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Pro Ser Asn
        35
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<211>
      28
<212>
      PRT
<213> Conus dalli
<400> 352
Ser Cys Thr Pro Pro Gly Gly Pro Cys Gly Tyr Tyr Asn Asp Cys Cys
Ser His Gln Cys Asn Ile Ser Arg Asn Lys Cys Glu
       353
<210>
<211> 25
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<220>
       PEPTIDE
<221>
<222>
       (1)..(25)
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<223>
<400> 353
Cys Glu Asp Xaa Gly Glu Xaa Cys Gly Ser Asp His Ser Cys Cys Gly
Gly Ser Cys Asn His Asn Val Cys Ala
            20
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<210> 354
<211> 27
<212> PRT
<213> Conus ermineus
<400> 354
Pro Cys Lys Pro Lys Gly Arg Lys Cys Phe Pro His Gln Lys Asp Cys
Cys Asn Lys Thr Cys Thr Arg Ser Lys Cys Pro
<210> 355
      27
<211>
      PRT
<212>
<213> Conus ermineus
<400> 355
Ala Cys Trp Ser Ser Gly Thr Pro Cys Gly Thr Asp Ser Leu Cys Cys
Gly Gly Cys Asn Val Ser Lys Ser Lys Cys Asn
<210>
      356
<211>
      27
<212>
      PRT
<213> Conus geographus
<400> 356
Cys Lys Ser Pro Gly Ser Ser Cys Ser Pro Thr Ser Tyr Asn Cys Cys
Arg Ser Cys Asn Pro Tyr Ala Lys Arg Cys Tyr
<210> 357
<211>
      29
<212>
      PRT
<213> Conus geographus
<400> 357
Cys Lys Ser Pro Gly Thr Pro Cys Ser Arg Gly Met Arg Asp Cys Cys
Thr Pro Cys Leu Leu Tyr Ser Asn Lys Cys Arg Arg Tyr
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<211> 30
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<213> Unknown
<220>
<223> unknown Conus species
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Cys Leu Ser Pro Gly Ser Arg Cys His Lys Thr Met Arg Asn Cys Cys
Thr Ser Cys Ser Ser Tyr Lys Gly Lys Cys Arg Pro Arg Lys
<210> 359
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<211> 27
<212> PRT
<213> Unknown
<220>
<223> unknown Conus species
<400> 359
Cys Lys Pro Pro Gly Arg Lys Cys Leu Asn Arg Lys Asn Glu Cys Cys
Ser Lys Phe Cys Asn Glu His Leu His Met Cys
<210>
       360
<211>
       26
<212> PRT
<213> Unknown
<220>
<223> unknown Conus species
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Asn Phe Cys Asn Thr His Leu Asn Met Cys
<210> 361
<211> 28
<212> PRT
<213> Unknown
<220>
<223> unknown Conus species
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Cys Ala Gly Pro Gly Thr Ile Cys Pro Asn Arg Val Cys Cys Gly Tyr
Cys Ser Lys Arg Thr His Leu Cys His Ser Arg Thr
<210> 362
<211> 27 .
<212> PRT
<213> Conus laterculatus
<400> 362
Lys Cys Trp Pro Ser Gly Ser Tyr Cys Arg Ala Asn Ser Lys Cys
Ser Gly Cys Asp Arg Asn Arg Asn Lys Cys Tyr
            20
<210>
       363
<211>
      27
<212>
      PRT
<213> Conus laterculatus
<400> 363
Cys Leu Pro Pro Gly Ser Tyr Cys Lys Ala Thr Thr Glu Val Cys Cys
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Ser Ser Cys Leu Gln Phe Ala Gln Ile Cys Ser
<210>
      364
<211> 30
<212> PRT
<213> Conus lynceus
<400> 364
Cys Lys Ser Pro Gly Ser Pro Cys Ser Val Thr Ser Tyr Asn Cys Cys
Thr Phe Cys Ser Ser Tyr Thr Lys Lys Cys Arg Ala Ser Leu
                               25
<210>
      365
<211>
      28
<212> PRT
<213> Conus lynceus
<400> 365
Cys Ala Gly Pro Gly Ala Ile Cys Pro Asn Arg Val Cys Cys Gly Tyr
Cys Ser Lys Arg Thr His Leu Cys His Ser Arg Thr
<210> 366
<211> 27
<212> PRT
<213> Conus lynceus
<400> 366
Ala Cys Trp Ser Ser Gly Thr Pro Cys Gly Thr Asp Ser Leu Cys Cys
Gly Gly Cys Asn Val Ser Lys Ser Lys Cys Asn
<210>
      367
<211>
      27
<212> PRT
<213> Conus lynceus
<400> 367
Lys Cys Trp Ser Pro Gly Thr Tyr Cys Arg Ala His Ser Lys Cys Cys
Arg Gly Cys Asp Gln Asn Arg Asn Lys Cys Tyr
<210>
      368
<211>
      29
<212> PRT
<213> Conus laterculatus
<400> 368
Cys Lys Ser Pro Gly Ser Ser Cys Ser Val Ser Met Arg Asn Cys Cys
Thr Ser Cys Asn Ser Arg Thr Lys Lys Cys Thr Arg Arg
<210> 369
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<213> Conus laterculatus
<400> 369
Thr Cys Trp Pro Ser Gly Thr Ala Cys Gly Ile Asp Ser Asn Cys Cys
Ser Gly Cys Asn Val Ser Arg Ser Lys Cys Asn
<210> 370
<211> 27
<212> PRT
<213> Conus laterculatus
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Lys Cys Trp Pro Ser Gly Ser Tyr Cys Arg Ala Asn Ser Lys Cys
Ser Gly Cys Asp Arg Asn Arg Ser Lys Cys Asn
<210>
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<213> Conus leopardus
Ser Leu Phe Glu Cys Ala Pro Ser Gly Gly Arg Cys Gly Phe Leu Lys
Ser Cys Cys Glu Gly Tyr Cys Asp Gly Glu Ser Thr Ser Cys Val Ser
Gly Pro Tyr Ser Ile
<210> 372
<211>
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<212>
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<213> Conus leopardus
<400> 372
Trp Pro Leu Asp Cys Thr Ala Pro Ser Gln Pro Cys Gly Tyr Phe Pro
Arg Cys Cys Gly His Cys Asp Val Arg Arg Val Cys Thr Ser
<210> 373
<211> 31
<212> PRT
<213> Conus leopardus
<400> 373
Cys Met Ser Pro Gly Gly Ile Cys Gly Asp Phe Gly Asp Cys Cys Glu
Ile Cys Asn Val Tyr Gly Ile Cys Val Ser Asp Leu Pro Gly Ile
<210> 374
<211> 27
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<212> PRT
<213> Conus leopardus
<400> 374
Tyr Cys Ala Pro Pro Gly Gly Ala Cys Gly Phe Phe Asp His Cys Cys
Gly Tyr Cys Glu Thr Phe Tyr Asn Thr Cys Arg
<210> 375
<211> 25
<212> PRT
<213> Conus magus
<400> 375
Cys Lys Gly Thr Gly Lys Pro Cys Ser Arg Ile Ala Tyr Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 376
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<213> Conus magus
<400> 376
Cys Ala Ser Tyr Gly Lys Pro Cys Gly Ile Tyr Asn Asp Cys Cys Asn
Thr Cys Asp Pro Ala Arg Lys Thr Cys Thr
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<211> 27
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<213> Conus miles
<400> 377
Cys Asn Asp Arg Gly Gly Cys Ser Gln His Pro His Cys Cys Gly
Gly Thr Cys Asn Lys Leu Ile Gly Val Cys Leu
<210> 378
<211> 25
<212> PRT
<213> Conus monachus
<400> 378
Cys Lys Ser Thr Gly Lys Ser Cys Ser Arg Ile Ala Tyr Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 379
<211> 25
<212> PRT
<213> Conus monachus
<400> 379
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Cys Lys Gly Lys Gly Ser Ser Cys Ser Arg Thr Met Tyr Asn Cys Cys
Thr Gly Ser Cys Asn Arg Gly Lys Cys
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<212>
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<400> 380
Ser Pro Pro Cys Met Lys Gly Gly Ser Ser Cys Arg Gly Thr Thr Gly
Val Cys Cys Gly Phe Cys Ser Asp Phe Gly Tyr Lys Cys Arg Asp Tyr
Pro Gln Asn
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<211>
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<213> Conus obscurus
<400> 381
Cys Leu Pro Asp Gly Thr Ser Cys Leu Phe Ser Arg Ile Arg Cys Cys
Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
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<210> 382
<211> 27
<212> PRT
<213> Conus purpurascens
<220>
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<221>
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      (1)..(27)
<223> Xaa is Hyp
<400> 382
Xaa Cys Lys Thr Xaa Gly Arg Lys Cys Phe Xaa His Gln Lys Asp Cys
Cys Gly Arg Ala Cys Ile Ile Thr Ile Cys Pro
<210>
      383
<211> 26
      PRT
<212>
<213> Conus purpurascens
<220>
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      Xaa at residue 5 is Hyp; Xaa at residue 12 is gamma-carboxy-Glu
<400> 383
Ser Cys Lys Leu Xaa Gly Ala Tyr Cys Asn Ala Xaa Asp Tyr Asp Cys
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Cys Leu Arg Cys Lys Val Gly Gly Thr Cys
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<210>
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<211>
      27
<212>
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<213> Conus purpurascens
<400> 384
Pro Cys Lys Lys Thr Gly Arg Lys Cys Phe Pro His Gln Lys Asp Cys
Cys Gly Arg Ala Cys Ile Ile Thr Ile Cys Pro
<210> -385
<211> 30
<212> PRT
<213> Conus pulicarius
<400> 385
Gln Cys Ser Pro Asn Gly Gly Ser Cys Ser Arg His Phe His Cys Cys
Ser Leu Tyr Cys Asn Lys Asn Thr Gly Val Cys Ile Ala Thr
<210> 386
<211> 27
<212> PRT
<213> Conus pulicarius
<400> 386
Glu Cys Thr Pro Pro Asp Gly Ala Cys Gly Leu Pro Thr His Cys Cys
Gly Phe Cys Asp Met Ala Asn Asn Arg Cys Leu
            20
<210>
       387
       27
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<400> 387
Glu Cys Thr Pro Pro Gly Gly Ala Cys Gly Leu Pro Thr His Cys Cys
Gly Phe Cys Asp Met Ala Asn Asn Arg Cys Leu
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      388
<211>
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<212> PRT
<213> Conus radiatus
<400> 388
His Gly Cys Lys Pro Leu Lys Arg Arg Cys Phe Asn Asp Lys Glu Cys
Cys Ser Lys Phe Cys Asn Ser Val Arg Lys Gln Cys
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<210> 389

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<211> 28
<212> PRT
<213> Conus radiatus
<400> 389
Arg Gly Cys Lys Pro Leu Lys Arg Arg Cys Phe Asn Asp Lys Glu Cys
Cys Ser Lys Phe Cys Asn Ser Val Arg Asn Gln Cys
<210> 390
<211> 27
<212> PRT
<213> Conus rattus
<400> 390
Cys Asn Ala Arg Asn Asp Gly Cys Ser Gln His Ser Gln Cys Cys Ser
Gly Ser Cys Asn Lys Thr Ala Gly Val Cys Leu
<210>
       391
<211>
       27
<212> PRT
<213> Conus rattus
<400> 391
Cys Asn Ala Arg Asn Ser Gly Cys Ser Gln His Pro Gln Cys Cys Ser
Gly Ser Cys Asn Lys Thr Ala Gly Val Cys Leu
<210> 392
<211> 27
<212> PRT
<213> Conus rattus
<400> 392
Cys Asn Ala Arg Asn Ser Gly Cys Ser Gln His Pro Gln Cys Cys Ser
Gly Ser Cys Asn Lys Thr Leu Gly Val Cys Leu
<210>
       393
<211>
       34
<212> PRT
<213> Conus rattus
<400> 393
Ala Cys Thr Pro Glu Gly Gly Ala Cys Ser Ser Gly Arg His Cys Cys
Gly Phe Cys Asp Asn Val Ser His Thr Cys Tyr Gly Glu Thr Pro Ser
                                25
Leu His
<210> 394
<211> 36
<212> PRT
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<213> Conus striatus
<400> 394
Ala Thr Asp Cys Ile Glu Ala Gly Asn Tyr Cys Gly Pro Thr Val Met
Lys Ile Cys Cys Gly Phe Cys Ser Pro Tyr Ser Lys Ile Cys Met Asn
Tyr Pro Lys Asn
<210> 395
<211> 26
<212> PRT
<213> Conus striatus
<400> 395
Cys Lys Leu Lys Gly Gln Ser Cys Arg Arg Thr Met Tyr Asp Cys Cys
Ser Gly Ser Cys Gly Arg Arg Gly Lys Cys
20 25
<210> 396
<211> 25
<212> PRT
<213> Conus striatus
<400> 396
Cys Lys Ala Ala Gly Lys Ser Cys Ser Arg Ile Ala Tyr Asn Cys Cys
Thr Gly Ser Cys Arg Ser Gly Lys Cys
<210> 397
<211> 26
<212> PRT
<213> Conus striatus
<400> 397
Cys Glu Ser Tyr Gly Lys Pro Cys Gly Ile Tyr Asn Asp Cys Cys Asn
Ala Cys Asp Pro Ala Lys Lys Thr Cys Thr
<210> 398
<211> 27
<212> PRT
<213> Conus stercusmuscarum
Cys Lys Ser Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
Ser Gly Ser Cys Ser Gly Tyr Thr Gly Arg Cys
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<211> 35
<212> PRT
<213> Conus stercusmuscarum
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Thr Thr Ser Cys Met Gln Ala Gly Ser Tyr Cys Gly Ser Thr Thr Arg
Ile Cys Cys Gly Tyr Cys Ala Tyr Phe Gly Lys Lys Cys Ile Asp Tyr
Pro Ser Asn
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<210> 400
<211> 26
<212> PRT
<213> Conus stercusmuscarum
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Cys Ala Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn
Ala Cys Asp Pro Ala Arg Asn Ile Cys Thr
<210>
      401
<211>
      26
<212> PRT
<213> Conus stercusmuscarum
<400> 401
Cys Val Ser Tyr Gly Lys Pro Cys Gly Ile Asp Asn Asp Cys Cys Asn
Ala Cys Asp Pro Ala Arg Asn Ile Cys Thr
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<211> 25
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<213> Conus stercusmuscarum
<400> 402
Cys Lys Gly Lys Gly Ala Ser Cys His Lys Thr Met Tyr Asp Cys Cys
Ser Gly Ser Cys Thr Arg Gly Arg Cys
<210> 403
<211> 25
<212> PRT
<213> Conus striolatus
<400> 403
Cys Lys Gly Lys Gly Ala Ser Cys Leu Arg Thr Ala Tyr Asp Cys Cys
Thr Gly Ser Cys Asn Arg Gly Arg Cys 20 25
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<211>
      24
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<400> 404
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Cys Arg Pro Ser Gly Ser Asn Cys Gly Asn Ile Ser Ile Cys Cys Gly
Arg Cys Val Asn Arg Arg Cys Thr
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<400> 405
Ser Thr Ser Cys Met Lys Ala Gly Ser Tyr Cys Val Ala Thr Thr Arg
Ile Cys Cys Gly Tyr Cys Ala Tyr Phe Gly Lys Ile Cys Ile Asp Tyr
Pro Lys Asn
<210>
      406
<211>
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      PRT
<213> Conus textile
<400> 406
Tyr Cys Thr Pro His Gly Gly His Cys Gly Tyr His Asn Asp Cys Cys
Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Glu
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<210> 407
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<213> Conus viola
<400> 407
Cys Ile Thr Leu Gly Thr Arg Cys Lys Val Pro Ser Gln Cys Cys Arg
Ser Ser Cys Lys Asn Gly Arg Cys Ala Pro Ser Pro Glu Glu Trp
<210>
      408
<211>
      25
<212> PRT
<213> Conus viola
<400> 408
Cys Lys Ser Arg Gly Ser Ser Cys Arg Arg Thr Ser Tyr Asp Cys Cys
Thr Gly Ser Cys Arg Asn Gly Lys Cys
<210> 409
<211>
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      PRT
<213> Conus viola
<400> 409
Ser Thr Ser Cys Met Glu Ala Arg Ser Tyr Cys Gly Pro Ala Thr Thr
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Lys Ile Cys Cys Asp Phe Cys Ser Pro Phe Ser Asp Arg Cys Met Asn
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Asn Pro Asn Asn
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<211>
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      PRT
<213> Conus viola
<400> 410
Cys Lys Gly Pro Gly Ala Ile Cys Ile Arg Ile Ala Tyr Asn Cys Cys
Lys Tyr Ser Cys Gly Asn Gly Lys Cys 20 25
<210>
       411
<211>
       28
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       PRT
<213>
      Conus viola
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Tyr Cys Thr Pro Tyr Gly Gly His Cys Gly Tyr Tyr Asn Asp Cys Cys 1 10 15
Ser His Gln Cys Asn Ile Asn Arg Asn Lys Cys Glu
<210>
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      27
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<213> Conus textile
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Cys Thr Pro Tyr Gly Gly His Cys Gly Tyr Asn His Asp Cys Cys Ser
His Gln Cys Asn Ile Asn Arg Asn Lys Cys Glu
<210> 413
<211>
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<220>
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Trp Ser Cys Ser Pro Tyr Arg Lys Lys Cys
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